Fact Sheet

The U.S. Environmental Protection Agency (EPA) Proposes to:

- **Issue a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Into Waters of the United States in Idaho from Regulated Small Municipal Separate Storm Sewer Systems (MS4s); and**

- **Designate Certain Entities as Regulated Small MS4s Needing NPDES Permit Coverage under the General Permit**

Public Comment Start Date:
Public Comment Expiration Date:

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EPA proposes to issue a NPDES General Permit for storm water discharges into waters of the United States in Idaho from regulated small MS4s. To ensure protection of water quality and human health, the Idaho MS4 General Permit (MS4GP) establishes conditions, prohibitions, and management practices for discharges of storm water from regulated small MS4s. Specifically, operators of regulated small MS4s must implement a comprehensive storm water management program (SWMP) to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA).

EPA also proposes to designate the MS4s owned and/or operated by the City of Moscow, Idaho, and the University of Idaho in Moscow, as regulated small MS4s with discharges that need NPDES permit coverage under the Idaho MS4GP.

Permit requirements, and the proposed designation of additional MS4s as needing NPDES permit coverage, are based on Section 402(p) of the CWA, 33 U.S.C. § 1342(p), and EPA regulations for permitting municipal storm water discharges (40 CFR §§ 122.28, 122.30-35, and 123.35; see also 64 FR 68722 [Dec. 8, 1999] and 81 FR 89320 [Dec. 9, 2016].

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures;

- descriptions of the regulated small MS4 discharges to be covered under the Idaho MS4GP;
- explanation of the conditions, prohibitions, and management practices for small MS4 discharges;
- explanation of the decision to designate the City of Moscow and the University of Idaho as regulated small MS4s that need permit coverage under the Idaho MS4GP; and
- technical references supporting the conditions in the MS4GP.

State Certification

EPA intends to request that the Idaho Department of Environmental Quality (IDEQ) consider certifying the Idaho MS4GP pursuant to Section 401 of the Clean Water Act, 33 U.S.C. §1341. EPA may not issue the final permit until IDEQ has granted, denied, or waived certification. IDEQ has reviewed preliminary drafts of the Idaho MS4GP. See Appendix 1 of this Fact Sheet. EPA will request IDEQ's certification of the permit upon completion of the public comment period.

Public Meetings

EPA has scheduled public meeting opportunities during the comment period in XXXX. For a complete schedule of these meetings, please see EPA's webpage at https://yosemite.epa.gov/r10/water.nsf/stormwater/ms4-id-wa, or contact EPA by phone as indicated at the beginning of this document. During these meetings, EPA staff will be available to discuss the draft permit and the designation decisions, answer questions, and accept written comments.

Public Comment and Opportunity for Public Hearing

Persons wishing to comment on the draft Idaho MS4GP, and/or EPA's decision to designate MS4 discharges within the City of Moscow as regulated small MS4 discharges, must do so in writing by the ***expiration date of the public notice***.

Comments must include the commenter's name, address, and telephone number, the permit name (Idaho MS4GP), and/or the MS4 decision topic. Comments must include a concise statement of the basis for the issue, and any relevant facts the commenter believes EPA should consider in making its final decisions on the conditions and limitations in the final MS4GP, and/or regarding the entities considered for designation as regulated MS4s. EPA must receive all comments no later than the expiration date of the public comment period.

Persons wishing to request that a public hearing be held may do so, in writing, no later than (**insert *date ~30 days from start of public notice period***). A public hearing is a formal meeting whereby EPA officials hear the public's views and concerns about an EPA action or proposal. All requests for a formal public hearing must state the nature of the issues to be raise, reference the NPDES permit name and permit number, and include the requester's name, address, and telephone number. Comments and/or requests for a public hearing must be submitted either

hard copy via U.S. Postal mail, or electronically via Email, to the attention of the EPA Regional Director:

U.S. Environmental Protection Agency, Region 10- Office of Water and Watersheds
Attn: Idaho MS4 General Permit
1200 6th Avenue, Suite 900, OWW-191
Seattle, WA 98101

E-mail: vakoc.misha@epa.gov

After the comment period, EPA will review and address all submitted comments. EPA's Regional Director for the Office of Water and Watersheds will then make final decisions regarding permit issuance and the other decision actions described in this notice. If EPA receives no comments, the tentative conditions in the draft MS4GP, and other decisions, will become final.

Pursuant to Section 509(b)(1) of the CWA, 33 USC 1369(b)(1), any interested person may appeal the General Permit in the Ninth Circuit Court of Appeals within 120 days following notice of EPA's final decision for the permit.

Pursuant to 40 CFR 124.19, any interested person may appeal the EPA decision to designate the City of Moscow and University of Idaho as regulated MS4s to the Environmental Appeals Board within 30 days following notice of EPA's final decision on these actions.

Documents Available for Review

The draft MS4GP, and other information related to these decisions are available on the EPA Region 10 website at: http://yosemite.epa.gov/r10/water.nsf/stormwater/ms4-id-wa

The draft MS4GP permit and related materials can be reviewed in person by contacting the EPA Region 10 Operations Office in Boise or in Region 10's Regional Office in Seattle, between 8:30 a.m. and 4:00 p.m. (Mountain Time), Monday through Friday:

United States Environmental Protection Agency, Region 10 - Idaho Operations Office
950 W. Bannock Street, Suite 900
Boise, ID 83702
(208) 378-5746

U.S. Environmental Protection Agency, Region 10- Office of Water and Watersheds
1200 Sixth Avenue, Suite 900, OWW-191
Seattle, Washington 98101
(206) 553-0523 or 1-800-424-4372 and request x-0523

For questions regarding the permit or fact sheet, contact Misha Vakoc at the phone number or e-mail listed above. Services for persons with disabilities are available by contacting Audrey Washington at (206) 553-0523.

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Acronyms

BE	Biological Evaluation
BOD	Biochemical oxygen demand
BMP	Best Management Practices
°C	Degrees Celsius
CFR	Code of Federal Regulations
cfu	Colony Forming Unit
CGP	Construction General Permit
COD	Chemical Oxygen Demand
CREAT	Climate Resilience Evaluation and Analysis Tool
CWA	Clean Water Act
CZARA	Coastal Zone Act Reauthorization Amendments
DMR	Discharge Monitoring Report
EA	Environmental Assessment
EFH	Essential Fish Habitat
EFNA	Edson Fichter Nature Area
EIS	Environmental Impact Statement
ELG	Effluent Limitation Guideline
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
Ft^2	Square feet
HUC	Hydrologic Unit Code
ID	Idaho
IDAPA	Idaho Administrative Procedures Act

IDDE	Illicit Discharge Detection and Elimination
IDEQ	Idaho Department of Environmental Quality
In	Inches
ITD	Idaho Transportation Department
LA	Load Allocation
LBR	Lower Boise River
lbs/day	Pounds per Day
mg/L	Milligrams per liter
ml	Milliliters
µg/L	Micrograms per liter
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
MS4GP	Municipal Separate Storm Sewer System General Permit
NEPA	National Environmental Protection Act
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NOT	Notice of Termination
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
OMB	Office of Management and Budget
OWW	Office of Water and Watersheds
O&M	Operations and maintenance
Pg/L	Picograms per Liter
PCBs	Polychlorinated Biphenyls
POTW	Publicly owned treatment works
PSNS	Pretreatment Standards for New Sources
QAPP	Quality assurance project plan
SCM	Storm Water Control Measures
SF	South Fork
SHPO	State Historic Preservation Office

SPCC	Spill Prevention and Control and Countermeasure
SS	Suspended Solids
SWMP	Storm water Management Program
SWPPP	Stormwater Pollution Prevention Plan
TP	Total Phosphorus
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TSS	Total suspended solids
UA	Urbanized Area
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
WA	Washington State
WAC	Washington Administrative Code
WLA	Waste load allocation
WQS	Water Quality Standards

I. Introduction

This fact sheet explains the rationale for the permit conditions in the Idaho Municipal Separate Storm Sewer System (MS4) General Permit (hereafter, the MS4GP or GP).

A. Statutory and Regulatory Overview

Storm water is the surface runoff that results from rain and snow melt. Urban development alters the landscape's natural infiltration, and human activity generates pollutants that can accumulate on paved or impervious surfaces. Uncontrolled pollutants and flow associated with storm water discharges from urban areas can negatively affect water quality. Contaminants enter storm water from a variety of sources in the urban landscape. In general, these pollutants degrade water quality in receiving waters associated with urbanizing watersheds. Urban storm water is often a contributing factor where there is a water quality standard (WQS) impairment in a particular water body. Storm water or urban runoff typically contains a mixture of pollutants, including the following major constituents:

- Sediment;
- Nutrients (nitrogen and phosphorus);
- Chlorides;
- Trace metals;
- Petroleum hydrocarbons;
- Microbial pollution; and,
- Organic chemicals (pesticides, herbicides, and industrial).[1]

The federal Clean Water Act Section 402(p), 33 U.S.C. § 1342(p) and the NPDES storm water regulations establish the permit requirements for discharges from certain MS4s. Section 402(p)(3)(B) of the CWA, 33 U.S.C. §1342(p)(3)(B) requires any NPDES permit for MS4 discharges to:

1) *effectively prohibit non-precipitation related flows from entering the MS4*, and
2) *require controls necessary to reduce pollutants in municipal storm water discharges to the maximum extent practicable (MEP), including management practices, control techniques, and system design and engineering methods, and/or other such provisions determined to be appropriate by the NPDES permitting authority*.

[1] *See*: Shaver, Horner, et al. 2007; EPA 1990 and EPA 1999.

Definitions of relevant terms, such as "*municipal separate storm sewer*," "*large MS4*," "*medium MS4*," and "*small MS4*," are found at 40 CFR §122.26(b). In general, a *municipal separate storm sewer* includes any publicly -owned conveyance or system of conveyances that discharge to waters of the United States and are designed or used for collecting and conveying storm water, are not combined sewers, and are not part of a publicly owned treatment works. Such *municipal separate storm sewer systems*, or MS4s, include roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man- made channels, and/or storm drains.[2]

In 1990, EPA developed the first phase of storm water regulations as directed by the CWA. The "Phase I" regulation established NPDES permit application and related requirements for discharges from large MS4s and medium MS4s. The Phase I regulation identified the large- and medium MS4s nationally based on the 1990 Census population. In Idaho, the Phase I storm water regulation automatically designated MS4 operators discharging within the boundaries of Garden City and Boise as medium MS4s, based on the 1990 Census.[3]

In 1999, EPA developed the "Phase II" storm water regulation, and designated additional small MS4s as needing NPDES permits. Regulated small MS4s include any MS4 discharge not already covered by Phase I that is located (partially or wholly) within an Urbanized Area (UA) as defined by the latest decennial Census. Regulated small MS4s in Idaho are located in Census-defined UAs of Coeur d'Alene; Lewiston; Nampa; Boise; Pocatello; and Idaho Falls. The Phase II regulation also defines regulated small MS4s as those systems with a UA that serve military bases or other properties owned by the United States; colleges and universities; large hospital or prison complexes; and highway systems.[4]

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[2] *See*: 40 CFR §122.26(b); 122.34(a); EPA 1990.

[3] In December 2000, EPA issued a single individual NPDES permit (#IDS027561) for the Phase I MS4 discharges owned/operated by six co-permittees operating in Garden City and Boise, ID; EPA reissued Permit #IDS027561 effective January 2013; this permit expires in January 2018.

[4] *See*: 40 CFR §§ 122.26(b)(16) and 122.30 through 37; and EPA 1999. U.S. Census maps for the Coeur d'Alene, Lewiston (ID)-Clarkston (WA), Nampa, Boise, Pocatello, and Idaho Falls UAs are available at http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/. Individual web links are listed in Appendix 2 of this document.

The Phase II regulation includes authority for EPA (or states that administer the NPDES program as the permitting authority) to require NPDES permits for other unregulated storm water discharges by a designation process.[5] If the NPDES permitting authority determines that other small MS4 discharges located outside of an UA cause, or have the potential to cause, an adverse impact on water quality, the permitting authority can designate those MS4(s) as regulated small MS4(s).[6]

Permits for small MS4 discharges must include terms and conditions to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.[7] The permittee must control pollutants in their MS4 discharges by addressing the six "minimum control measures," i.e., public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post construction runoff control, pollution prevention and good housekeeping. A regulated small MS4 operator may seek NPDES permit coverage under an available general permit or may apply for an individual permit. [8]

In 2016, EPA revised the Phase II regulations to outline procedures for how the NPDES permitting authority must establish the required permit conditions in a small MS4 general permit, and how small MS4s obtain coverage under an available general permit, to provide appropriate opportunity for public notice and comment. These revisions are referred to as the MS4 General Permit Remand Rule. [9]

As the NPDES permitting authority in Idaho, EPA Region 10 includes terms and conditions in the Idaho MS4GP that are fully consistent with the federal Phase II storm water regulatory requirements.

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[5] *See:* 40 CFR 122.26(a)(9)(i)(C) and (D).

[6] See: 40 CFR 122.32(a)(2) and 123.35(b).

[7] *See*: CWA Section 402(p)(3); 40 CFR §§ 122.34(a); EPA 2016a and 2016b. EPA now refers to this phrase as the *MS4 permit standard*.

[8] *See:* 40 CFR 122.34(b) and additional discussion in Part III of this Fact Sheet.

[9] *See*: EPA 2016b. Various groups challenged EPA's 1999 Phase II storm water rule in federal courts, resulting in the rule's partial remand back to EPA in *Environmental Defense Center v. U.S. Environmental Protection Agency*, 344 F.3d. 832 (9th Cir. 2003). Specifically, the U.S. Court of Appeals for the Ninth Circuit remanded the Phase II rule's provisions for small MS4 NPDES general permits because they lacked procedures for permitting authority review and public notice, and for the opportunity to request a hearing on NOIs submitted under general MS4 permits. EPA's 2016 MS4 General Permit Remand Rule resolves these issues.

B. Use of a General Permit vs. Individual NPDES Permits

Federal regulations at 40 CFR 122.28 and 122.33(b) allow EPA to issue a general permit to regulate discharges from numerous facilities (such as regulated small MS4s) under one NPDES permit when those facilities:

- Are located within the same geographic area;
- Involve the same or substantially similar types of operations;
- Discharge the same types of wastes;
- Require the same effluent limits or operating conditions;
- Require the same or similar monitoring requirements; and
- In EPA's opinion, the discharges can be controlled under a general permit rather than under separate individual permits.

Regulated small MS4s in Idaho represent substantially similar public drainage facilities that drain and discharge storm water runoff from densely populated urban areas. All regulated small MS4s subject to the MS4GP are required to implement the same or similar narrative effluent limits and requirements.[10] For administrative efficiency and consistency, EPA has determined that a general permit is an appropriate mechanism to address the discharges from identified regulated small MS4s in Idaho.

Where a general permit must be issued to control small MS4 discharges, the NPDES permitting authority must select between two alternative permitting approaches as outlined in 40 CFR 122.28(d) (referred to as either the "Comprehensive General Permit" or the "Two-Step General Permit"), then include the minimum requirements and procedures associated the selected approach.

In the Idaho MS4GP, EPA uses a hybrid of the Two-Step General Permit approach described in 40 CFR 122.28(d)(2). Specifically, EPA identifies storm water management control requirements that apply to all eligible small MS4 permittee discharges upon issuance of the MS4GP. For a subset of the GP requirements, EPA will allow a MS4 permittee to submit one or more requests for Alternative Control Measures. Permittees may submit supplemental or individualized plans or information, as an Amended Notice of Intent for coverage under the MS4GP, that it deems to be equivalent to the comparable MS4GP provision. In keeping with the Two Step General Permit process described in 40 CFR 122.28(d)(2), EPA will review any Alternative Control Measure request, and determine whether the Alternative Control Measure is acceptable and meets the MS4 standard established under the MS4GP. If necessary, EPA will

[10] For additional discussion of effluent limitations for MS4 permits, see page 89337 of EPA 2016b.

subsequently propose unique MS4-specific requirements for public comment and hearing. Based on public comments received, EPA may formally modify the MS4GP to incorporate the unique MS4-related information as an enforceable provision. See MS4GP Part 2.9, and subsequent discussion in Part III.D.4 of this Fact Sheet.

C. Permit History

In 2006 EPA Region 10 began issuing individual NPDES permits to all regulated small MS4s in Idaho. EPA systematically issued such permits by Urbanized Area, and as a result, all existing regulated small MS4 discharges in Idaho (except those in the Lewiston Urbanized Area) have been covered by and complying with individual NPDES permits. As of October 2014, all of these individual MS4 permits have expired and all existing MS4 permittees are now authorized to discharge under administrative extension.[11] Each existing MS4 permittee submitted complete permit renewal application(s) prior to their respective permit's expiration date, and their individual permit coverage was therefore administratively extended, pursuant to 40 CFR 122.6.

In 2008, EPA proposed, but did not finalize, permits for regulated small MS4 discharges within the Lewiston Urbanized Area, namely for the City of Lewiston and ITD District #2. EPA subsequently received updated MS4 permit applications from the City of Lewiston and Lewis-Clark College.

Since 2006, EPA has also received additional MS4 permit applications from other entities in UAs that recognize their NPDES regulatory obligation to obtain MS4 permit coverage.

As stated above, upon EPA's issuance of the MS4GP in Idaho, EPA intends to authorize MS4 permit coverage to all eligible regulated small MS4s that have submitted complete and appropriate NPDES permit applications, permit renewal applications, and/or Notices of Intent under the new GP.

D. Permit Development

Instead of reissuing individual permits for regulated small MS4s, EPA developed the permit terms and conditions in the MS4GP to address the MS4 control measure requirements of 40 CFR §122.34. that EPA determines to be appropriate, practicable, and necessary to reduce the discharge of pollutants from regulated small MS4s across the state of Idaho.

[11] Expired Phase II MS4 permits are available for review at *http://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/Current+ID1319*

40 CFR§ 122.34(a) requires that the NPDES permitting authority include terms and conditions in each successive permit that meet all of the requirements of 40 CFR 122.34 "*based on its evaluation of the current permit requirements, record of permittee compliance and program implementation progress, current water quality conditions, and other relevant information."* EPA intends for iterative progress to be made towards meeting water quality objectives from one MS4 permit term to the next permit term. As the NPDES permitting authority, EPA must consider adjustments in the form of modified permit requirements, where necessary, to reflect current water quality conditions, BMP effectiveness, and other current relevant information. EPA cannot reissue the same permit conditions for subsequent five year terms without considering whether more progress can or should be made in meeting water quality objectives where the receiving waters are not attaining water quality standards."[12]

The Idaho MS4GP combines into a single document the narrative requirements applicable to all small MS4 permittees that address the six minimum measures required by 40 CFR § 122.34 (a) and (b). Where needed based on the receiving water body, the MS4GP includes water quality based requirements for individual MS4 operators, as required by 40 CFR §§122.34(c) and 122.44(d)(1). Finally, the MS4GP also includes evaluation and assessment requirements, as required by 40 CFR §122.34(d).

EPA considered a variety of information in order to develop the MS4GP provisions, including:

- Terms and conditions required in the prior small MS4 individual permits;
- Applicable total maximum daily loads (TMDLs) and impaired waters listings for relevant Idaho receiving waters;
- Annual Reports submitted by existing MS4 permittees during the prior permit terms;
- Updated UA maps and boundaries based on the Year 2010 Census;
- Input from stakeholders based on their review of preliminary draft permit documents;
- National MS4 permit-related summary information as compiled by EPA, including:
    - *Compendium Part 1: Six Minimum Control Measure Provisions,* November 2016*;*
    - *Compendium Part 2: Post Construction Performance Standards,* November 2016*;*
    - *Summary of State Post Construction Stormwater Standards,* July 2016
    - EPA's November 2014 Memo entitled *Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs;*" and the

[12] See: EPA 2016b, pages 89337-89338.

- *MS4 Permit Improvement Guide,* April 2010; [13]

- Permit application materials submitted by each entity listed in Appendix 1 of this document and MS4GP Appendix A.1, including information about existing SWMP implementation from Annual Reports submitted by these existing MS4 Permittees;

- Conclusions and recommendations from the National Research Council Report entitled *Urban Storm Water Management in the United State*s, October 2008;

- Technical developments in the field of storm water management, including recent research and information on the effective, feasible methods for on-site management and treatment of storm water using practices commonly referred to as "low impact development," (LID) "green infrastructure" (GI) and/or "green storm water infrastructure" (GSI) techniques.

- Other MS4 permits issued by EPA for regulated small MS4s in Idaho, Washington, Massachusetts, and New Mexico, as well as MS4 permits issued by other state NPDES permit authorities.

E. Types of Regulated Small MS4s in Idaho

In Idaho, various public entities own and/or operate regulated small MS4s within UAs, including, but not limited to: cities and counties; local highway districts; the Idaho Transportation Department (ITD); and state or community colleges and universities. "Regulated small MS4s" may also include the storm water conveyance or system of conveyances owned or operated by any other public entity that EPA designates as needing a NPDES permit. Such a designation may be based on an EPA finding that discharges from the MS4 contribute to a violation of a water quality standard, is a significant contributor of pollutants to waters of the United States, and/or substantially contribute to the pollutant loadings of a physically interconnected (and otherwise regulated) small MS4.[14]

EPA intends to provide permit coverage under the MS4GP to both *Existing MS4 Permittees*, and *New MS4 Permittees*. After permit issuance, any new MS4 that meets the definition of a "regulated small MS4" will be able to obtain coverage under the MS4GP upon EPA's receipt of a Notice of Intent for permit coverage pursuant to procedures described later in this document.

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[13] These documents are available on EPA's website at https://www.epa.gov/npdes/municipal-sources-resources

[14] See: 40 CFR §§ 122.26(a)(9)(i); 122.32(a) and 123.35(b)(4).

- "*Existing MS4 Permittees*" are those entities listed in Appendix A.1 of the MS4GP that previously had individual NPDES permit coverage, and that have submitted a permit renewal application.
- "*New MS4 Permittees*" are listed in Appendix A.2 of the MS4GP include regulated entities that previously submitted MS4 permit applications to EPA, but have not yet received final permit coverage (including regulated small MS4s within the Lewiston, Coeur d'Alene and Pocatello UAs).
    - After the effective date of the MS4GP, EPA will list other new MS4 permittees in Appendix A.2, including small MS4s that submit NOIs based on their automatic designation as a result of expanded Year 2010 Urbanized Area boundaries; and MS4s located within the corporate city boundary of Moscow, Idaho, that EPA designates as needing NPDES permit coverage and who submit a complete NOI as required by the MS4GP.

In contrast, the entities listed in Table 1 below previously communicated to EPA that they do not own or operate a small MS4 within the State of Idaho. Despite their physical locations within the Census-defined UAs listed therein, discharges from these MS4s are not NPDES-regulated because either these entities do not own or operate a MS4, or the discharges do not reach waters of the United States.

Table 1*: Municipal Entities That Do Not Own or Operate a Regulated Small MS4*[15]

Urbanized Area	Municipal Entity
Coeur d'Alene UA	City of Heutter; City of Hayden; City of Fernan Lake Village; City of Dalton Gardens; City of Hayden Lake; Kootenai County
Boise UA	City of Meridian, City of Eagle
Idaho Falls UA	City of Iona, Bonneville County, Idaho National Laboratory

F. Geographic Area of Coverage

For Idaho cities that own and/or operate a regulated small MS4, EPA has defined the geographic area of coverage under the MS4GP as the *entire incorporated City area served by the MS4*.

In the prior individual permits for small MS4 operators, EPA had defined the Permit Area as only the "*portion of the MS4 that is located within a UA as determined by the latest Decennial Census*," consistent with the Phase II regulations at 40 CFR §122.32(a)(1). EPA continues to

[15] Relevant information provided to EPA by these entities is available in the Administrative Record for this GP.

define the minimum area of permit coverage in this manner for regulated MS4s owned and/or operated by counties, highway districts, ITD, colleges and universities.

However, EPA intends for regulated MS4 cities to apply their storm water management actions in order to appropriately control the discharge of pollutants from their MS4s; therefore, it is reasonable to expand the permit coverage area for regulated MS4 cities to include the entire city jurisdiction served by the MS4. EPA reviewed current city ordinances in regulated small MS4 cities, and finds that most regulated small MS4 cities already impose their SWMP-related ordinances on a citywide basis to areas served by their MS4. EPA believes it is both pragmatic and necessary for all regulated small MS4 cities to impose their storm water management controls across their jurisdiction in areas draining into their MS4.

EPA determines that the pollutants in the regulated small MS4 discharges from cities contribute to elevated levels of pollutants (such as sediment, nutrients, and bacteria) into adjacent receiving waters. Preventative storm water management controls, comprehensively imposed in areas served by the MS4 throughout the city jurisdiction, is necessary, appropriate, and consistent with applicable regulatory requirements in 40 CFR §§122.26(a)(1)(v), 122.26(a)(9)(C). 122.26(a)(9)(D), and 122.34(c).

Where any regulated small MS4 city must expand the scope of its existing storm water management controls to encompass all areas of the jurisdiction served by the MS4, the regulated small MS4 city must do so no later than 180 days prior to the expiration date of the MS4GP.

II. Receiving Waters & Applicable Water Quality Standards

A. Overview

EPA intends to authorize municipal storm water discharges into waters of the United States from regulated small MS4s owned and/or operated by the entities listed in Appendix 1 of this Fact Sheet. Appendix 7 of this Fact Sheet lists all relevant receiving waters, by Urbanized Area or City, and the applicable Idaho water quality standards. Appendix 8 of this Fact Sheet lists the water quality impairment and TMDL status for each receiving water.

Section 301(b)(1)(C) of the CWA and regulations at 40 CFR 122.44 require the NPDES permit authority to develop limitations in permits necessary to meet water quality standards. A State's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria, and an anti-degradation policy. The use classification system designates the beneficial uses for each water body, such as drinking water supply, contact recreation, and aquatic life. The numeric and narrative water quality criteria are the amount of any pollutant

deemed necessary by the State to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

40 CFR §122.44(d) specifically requires that NPDES permits include conditions necessary to ensure compliance with the water quality requirements of all affected States.

B. Designated Beneficial Uses

In Idaho, the IDEQ specifies that all waters must provide for industrial and agricultural water supply, wildlife habitats, and aesthetics, in addition to the specific use classifications for each receiving water listed in Appendix 7. [16]

In addition to meeting Idaho water quality requirements, discharges from regulated small MS4s in the Coeur d'Alene and Lewiston, ID, UAs, and within the boundaries of the City of Moscow, ID, must meet applicable water quality requirements for storm water management of the State of Washington. Regulated small MS4s in these three areas discharge to receiving waters immediately upstream from the Idaho/Washington state border; therefore, Appendix 7 also acknowledges the applicable water quality standards and requirements for storm water management for Washington and applicable water quality standards for the Spokane Tribe of Indians.[17]

C. Anti-degradation

IDEQ will complete an anti-degradation review as part of its final CWA Section 401 certification for the Idaho MS4GP; see Appendix 1 and of this document for correspondence related to the timing of IDEQ's certification. Upon receipt of the final CWA Section 401 certification, EPA will review the anti-degradation analysis to ensure it is consistent with the State's 401 certification requirements and the State's anti-degradation implementation procedures.

D. Water Quality Limited Waters and Total Maximum Daily Loads

Any water body that does not, and/or is not, expected to meet the applicable State water quality standards is described as "impaired" or as a "water quality-limited segment." Section 303(d) of the CWA, 33 U.S.C. § 1313(d), requires States to identify impaired water bodies within the State and develop TMDL management plans for those impaired water bodies. TMDLs define both waste load allocations (WLAs) and load allocations (LAs) that specify how much of a

[16] See IDAPA 58.01.02.100.03.b and c, 100.04 and 100.05

[17]

particular pollutant can be discharged from both regulated and unregulated sources, respectively, such that the water body will again meet State water quality standards. IDEQ's 2012 *Integrated Section 303(d)/Section 305(b) Report* (2012 Integrated Report) contains the list of impaired water bodies in Idaho required by CWA Section 303(d).[18]

Appendix 8 lists receiving waters for regulated small MS4 discharges expected to be covered by the MS4GP, indicates waterbody assessment units, or segments, that IDEQ considers impaired, and the status of any applicable TMDL(s) for those segments .

NPDES permit conditions must be consistent with the assumptions and requirements of available WLAs.[19] NPDES permit conditions for regulated storm water discharges must be defined, consistent with the assumptions and requirements of available water quality information and TMDLs. In general, EPA's guidance recommends that the NPDES permitting authority use best management practices (BMPs) to implement applicable WLAs and load reduction targets in a NPDES permit. When using BMPs as narrative permit limitations to implement a WLA or load reduction target, the NPDES permit must provide a monitoring mechanism to assure compliance. The NPDES permitting authority may require the use of expanded or better-tailored BMPs in successive permit terms when prior monitoring demonstrates such controls are necessary to implement the WLA and protect water quality.[20]

EPA is proposing specific control measures in the MS4GP Parts 3 to reduce pollutants to the MEP and protect water quality and additional in Part 4 to address water quality impairments, and, where necessary, to comply with the requirements of an applicable TMDL(s). Sections III.F and V of this Fact Sheet contains the rationale for additional water quality based requirements. Appendix 6 and Appendix 7 of this document provides detailed rationale for additional requirements by receiving waterbody and impairment or TMDL status, respectively..

In the event that EPA approves other TMDLs for receiving waters prior to the final issuance of the MS4GP, and the TMDL(s) contain waste load allocation(s) for one or more regulated small

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[18] The IDEQ's 2012 Integrated Report is available online at: https://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx; All applicable Idaho TMDL documents are available on IDEQ's website at http://deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/

[19] See: 40 C.F.R. §§ 122.34(c)(1) and 122.44(d)(1)(vii)(B).

[20] See: EPA 1996; EPA 2002; EPA 2014a; EPA 2014b; and EPA 2016b.

MS4s, EPA may incorporate additional provisions for one or more of the regulated MS4 permittees into the final permit. If EPA approves other TMDLs for receiving waters after the MS4GP effective date (but prior to the expiration date of the MS4GP), and WLAs are included for one or more of the regulated MS4 permittees covered by the MS4GP, EPA may elect to address the need for additional actions by requesting additional information from the MS4 permittee(s). Upon submittal of such additional information detailing appropriate and necessary actions for storm water management, EPA may modify the permit to incorporate such actions into the permit. MS4GP Part 7.1 addresses such a permit modification, consistent with the NPDES regulations at 40 CFR §§122.28(d), 122.62, 122.64 and 124.5.

III. Basis for Permit Conditions

A. Maximum Extent Practicable

EPA's permitting approach for municipal storm water discharges directs permittees to use BMPs in the first five-year permit, and directs the use of expanded or better tailored BMPs in subsequent permits to provide for the attainment of water quality standards. At a minimum, NPDES permits for regulated small MS4s must include terms and conditions to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements under the CWA. The permit must include, at a minimum, provisions that satisfy the requirements set forth in the federal regulations at 40 CFR § 122.34(a) through e.[21]

In the MS4GP Parts 3, 4, and 5, EPA has defined the required storm water management control measures, and evaluation and assessment requirements, that regulated small MS4 operators in Idaho must implement in order to comply with the MS4 permit standard. *Maximum extent practicable* is the statutory standard that describes the level of pollutant reduction that small MS4 operators must achieve, and what constitutes MEP should continually adapt to current conditions and understanding of BMP effectiveness. The concept of MEP means that in some circumstances a small MS4 operator may need to increase their level of effort in order to control pollutants in discharges through the MS4.[22] Neither the CWA nor the storm water regulations provide a specific definition of MEP. The lack of a detailed definition allows for flexibility in MS4 permitting.

[21] See EPA 2016b.
[22] See EPA 1999, at page 68754.

The iterative process of imposing the MEP standard over successive permit terms consists of the NPDES permitting authority defining clear, specific, and measurable NPDES permit requirements; MS4 permittees implementing the required actions as part of a comprehensive program; and the MS4 permittee and NPDES permitting authority evaluating the effectiveness of BMPs used. The process also includes the NPDES permitting authority revising required BMPs in permits when necessary, the MS4 operator implementing the revisions through revised permit requirements, and then evaluating BMP effectiveness again. This iterative permitting process continues, permit term to permit term, until water quality standards are attained.[23]

B. Effluent Limitations

The terms and conditions of a MS4 permit are effluent limitations, and may consist of narrative, numeric, and other types of requirements. Examples include: implementation of specific tasks or practices; BMP design requirements; performance requirements; adaptive management requirements; schedules for implementation and maintenance; and frequency of actions. The MS4GP requires all MS4 Permittees to control pollutants in their MS4 discharges through the development and implementation of a suite of BMPs as the primary mechanism to achieve the required pollutant reductions.

In its broadest sense, a *BMP* means any type of structural or non-structural practice or activity undertaken by the MS4 Permittee in the course of implementing its SWMP. Whether a particular practice or activity is an enforceable NPDES permit requirement depends on the NPDES permitting authority's articulation of the relevant term or condition.[24]

The terms and conditions in the MS4GP (when compared to EPA's previously issued individual small MS4 permits in Idaho) reflect EPA's iterative decision-making process to determine requirements necessary to *"reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act*" between successive NPDES permit terms. Accordingly, the MS4GP defines more explicit and prescriptive BMPs, as clear, specific, and measurable requirements, than were in the existing administratively extended small MS4 permits in Idaho.

Where a Permittee's MS4 discharges into waters currently meeting Idaho water quality standards, the Permittee must comply with the MS4GP requirements in Parts 1-3 and 5-7 in order to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality,

[23] See also EPA 2010 for EPA's discussion of MEP.

[24] See 40 CFR § 122.34(a), 40 CFR § 122.44(k), and EPA 2016b, especially discussion of BMP on page 89337.

and to satisfy the appropriate water quality requirements of the Clean Water Act – in other words, in order to meet the MS4 permit standard for Idaho.

To meet the MS4 permit standard where a Permittee's MS4 discharges into waters that are impaired and do not meet applicable Idaho water quality standards, or into waters that do not meet the downstream Washington State or Spokane Tribes' water quality standards, the MS4 Permittee must also comply with additional water quality based requirements as directed by MS4GP Part 4 and MS4GP Appendix F.

NPDES regulations provide the basis for imposing water quality-based effluent limitations on certain regulated small MS4 discharges to be covered by the MS4GP.[25] As previously discussed, NPDES permit conditions must be consistent with the assumptions and requirements of available WLAs, and must include more stringent terms and conditions that modify or are in addition to the minimum control measures in order to protect water quality. Where sources within a specific category of discharges are subject to water quality-based requirements, the sources in that discharge category must be subject to the same water quality based requirements.

Appendix 5 of this document identifies the impaired waterbodies in Idaho and Washington where regulated small MS4s currently discharge. Given the type of pollutants causing the impairments, and considering the extent and distribution of regulated small MS4 discharges into these impaired waters, EPA presumes that regulated small MS4 discharges likely contribute, in some part, to exceedances of water quality standards and the associated impairment(s) to these receiving waters. While implementation of the minimum control measures described in MS4GP Part 3 constitutes progress towards reducing or eliminating the pollutants in MS4 discharges likely contributing to such exceedances, EPA believes that the control measures in Part 3 alone may be insufficient to fully eliminate the MS4's contributions to the water quality impairment. It is necessary for the MS4 Permittee to focus explicit attention to assessing and/or controlling the impairment pollutant, as well.

Therefore, EPA determines that it is necessary and appropriate to include additional terms and conditions in the MS4GP for MS4 operators that discharge to impaired receiving waters. The additional requirements referenced in MS4GP Part 4 (and supplemented by MS4GP Appendix F) are applicable to specific MS4 Permittees, based upon the impairment status and individual

[25] 40 C.F.R. §§ 122.28(a)(3), 122.44(d)(1)(vii)(B) and 122.34(c)(1). See also *Defenders of Wildlife vs. Browner.* 191 F.3d 1159 (9th Cir. 1999): and EPA 1999 at pages 68722, 68753, and 68788, and EPA 2016(b).

considerations in the receiving watershed as discussed in Part III.F and Appendices 6 and 7 of this Fact Sheet.

C. Discussion of the MS4GP's Applicability and Notification Requirements

1. Facilities Eligible for Coverage (MS4GP Part 1.1)

The MS4GP authorizes storm water discharges from regulated small MS4s meeting the definition at 40 CFR §122.26(b)(16), i.e., those located in a Census defined UA (unless the NPDES permitting authority grants a waiver) and/or MS4s designated as needing a permit by EPA pursuant to 40 CFR §122.32(a)(2) or §122.26(f).[26]

Regulated small MS4s are located entirely or partially within a Census-defined UA.[27] In Idaho the Year 2010 Census did not delineate new UAs; instead, the previous Year 2000 Census UA boundaries were expanded for the Coeur d'Alene, Lewiston, Nampa, Boise, Pocatello, and Idaho Falls UAs. EPA is notifying any new regulated small MS4s within these existing UAs that they are now subject to the NPDES program. All existing MS4 permittees must continue to comply with the NPDES storm water permit regulations even when there is a boundary change based on revised Census data, unless the regulated small MS4 operator requests and EPA grants a waiver pursuant to 40 CFR §122.32.[28]

2. Geographic Area of Permit Coverage (MS4GP Part 1.2)

For reasons discussed in Section I.F of this Fact Sheet, EPA proposes to define the minimum geographic Permit Area for regulated small MS4s owned and/or operated by cities as *entire incorporated City area served by the MS4*.

For MS4s operated by counties, highway districts, ITD, colleges, and/or universities, EPA is proposing to define the minimum geographic Permit Area to include *the area under the entity's jurisdictional control that is served by the MS4 within an Urbanized Area in Idaho.*

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[26] See further discussion of waivers and designations in Section IV of this Fact Sheet.

[27] On March 26, 2012, the Census Bureau published the final listing of UAs for the Year 2010 Census. The Census Bureau's updated manner of determining an Urbanized Area for the Year 2010 Census is explained in 76 Federal Register (FR) 53030, August 24, 2011, at http://www.census.gov/geo/reference/pdfs/fedreg/fedregv76n164.pdf

[28] See: EPA 1999, at page 68752. Online links to maps of the Year 2000 UAs and Year 2010 UAs in Idaho are available in Appendix 2 of this document. See also the discussion of waivers in Section IV of this Fact Sheet.

3. Eligibility Requirements (MS4GP Part 1.3)

NPDES general permits may exclude specific sources from coverage. To prevent potential conflicts with other applicable federal requirements, the MS4GP Part 1.3 requires new applicants seeking permit coverage after the permit effective date to document their discharge eligibility status related to compliance with the Endangered Species Act (ESA), Essential Fish Habitat (EFH) requirements, and the National Historic Properties Act.[29] Instructions for applicants to confer with EPA and document their eligibility in the NOI are provided in MS4GP Appendices C and D.

EPA has evaluated the permit renewal applications received from existing MS4 permittees (and has completed additional analyses, available in the Administrative Record), and finds that all entities in MS4GP Appendix A.1 are eligible for coverage under the GP. EPA continues to analyze the eligibility of MS4 operators listed in MS4GP Appendix A.2 for permit coverage. EPA expects to conclude its analyses of these discharges, and after issuance of the final MS4GP, EPA intends to authorize all eligible discharges under the MS4GP.

All other regulated small MS4 applicants who must seek coverage under the MS4GP must submit a Notice of Intent (NOI) with documentation to support the applicant's compliance with the ESA, EFH, or National Historic Properties Act.

4. Notice of Intent Requirements (MS4GP Parts 1.4)

MS4GP Part 1.4 any regulated small MS4 operators seeking discharge authorization under the GP to submit a NOI and references both the content and deadlines for such a submittal. MS4GP Appendix B identifies the information required in any NOI submitted after the permit effective date. Applicants may use the optional format provided in MS4GP Appendix B, or they may submit the required information as a letter, report or table with all necessary attachments.

Consistent with EPA's choice to issue a Two Step General Permit pursuant to 40 CFR 122.28(d)(2), this Part also requires that a permittee submit an amended NOI whenever there is any material change in the information submitted in its original NOI or application materials, and/or as allowed by other provisions of the GP.[30] Further, EPA may request that a Permittee update or amend its NOI information at any time. EPA will review all amended NOI information submitted by an applicant or Permittee to determine whether the information comports with the MS4 permit standard, and/or whether new permit terms and conditions need to be added

[29] See 40 CFR §§122.28(a)(4)(ii) and 122.49.
[30] See discussion of MS4GP Part 2.9 elsewhere in this document.

to the GP. If EPA determines that new terms or conditions must be added to the MS4GP for the permittee or applicant, such terms and conditions will be proposed for public comment and opportunity for public hearing according to the existing NPDES permit modification procedures..

Regulated small MS4 operators listed in in MS4GP Appendix A.1 have submitted either a permit application or a renewal application that EPA considers equivalent to a Notice of Intent and are not required to submit an NOI to obtain permit coverage under the MS4GP. As allowed by 40 CFR 122.28(b)(2)(iv) and (d)(2)(ii), EPA notifies these MS4 operators that it has reviewed the information submitted to date, and, unless the operator elects to submit amended NOI information or other information is submitted during the public comment period, EPA intends to cover them under the MS4GP immediately following the effective date of the GP., [31]

5. Authorization to Discharge (MS4GP Part 1.5)

A regulated small MS4 operator will be authorized to discharge under the MS4GP upon their receipt of EPA's written notification that EPA has granted coverage and has assigned the Permittee a unique permit number. When an MS4 Permittee elects to submit amended NOI information as allowed by certain provisions of the GP, EPA will review the information, develop unique terms and conditions for that permittee as needed, and will provide opportunity for public comment and hearing on those new or unique provisions. Upon completion of these public notice procedures, EPA will subsequently notify the individual MS4 Permittee in writing of the final enforceable terms and conditions for that Permittee.

6. Requirements for Individual NPDES Permits (MS4GP Part 1.6)

As allowed by the NPDES regulations at 40 CFR §122.28(b)(3)(iii), if an otherwise eligible regulated small MS4 operator desires an individual permit , the operator may request to be excluded from coverage under the MS4GP by applying for an individual NPDES permit.[32] The operator must submit a written request to EPA no later than 90 days after the MS4GP effective date. Any request for an individual NPDES permit will be reviewed and processed by EPA in accordance with federal regulations at 40 CFR Part 124. EPA may grant the request by for an individual NPDES permit if EPA agrees that the reasons cited by the small MS4 owner/operator clearly demonstrate that inclusion under the MS4GP is inappropriate.

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[31] See: 40 CFR §122.28(b)(2), and other information in the Administrative Record.
[32] See also 40 CFR 122.33(b)(2).

In accordance with 40 CFR §122.28(b)(3)(i), EPA may instead determine that providing coverage under the MS4GP is inappropriate for a particular regulated small MS4, and may require the entity to apply for an individual NPDES permit, for specific reasons outlined in MS4GP Part 1.6.3. The applicability of the MS4GP is automatically terminated upon the effective date of an individual NPDES permit.

7. Notice of Termination Requirements under MS4GP Part 1.7

A Permittee covered by the MS4GP may terminate permit coverage using the procedure outlined in MS4GP Appendix B.2 when/if a new operator has assumed responsibility for the entire MS4, and in turn the MS4 Permittee has ceased their operational control of the MS4. Termination of coverage under a NPDES permit is also available if the MS4 Permittee completely eliminates all discharges from their MS4.

To terminate coverage, the Permittee must submit a letter describing the basis for the request to terminate, including sufficient detail to substantiate the reasons for the termination. In cases where co-Permittee relationships exist, coverage for the requesting Permittee may be terminated without affecting the coverage of the other co-Permittees subject to the permit, however, all parties remain responsible for submitting updated NOI information according to MS4GP Part 1.4. EPA will follow the relevant NPDES regulations (and the procedure outlined in MS4GP Appendix B.2) when considering any request to terminate coverage under the MS4GP.

D. Discussion of the MS4GP's Limitations and Conditions

1. Discharges Authorized Under the MS4GP (Part 2.1)

The MS4GP conditionally authorizes municipal storm water discharges, and certain types of non-storm water discharges, from the Permittee's MS4 within the Permit Area, provided that the Permittee complies with the terms and conditions of the MS4GP.

2. Other Conditional Requirements (MS4GP Parts 2.2 through 2.7)

The MS4GP further limits the Permittee's authorization to discharge municipal storm water in the following ways:

- **Part 2.2** states that the Permittee is not authorized to discharge storm water from the small MS4 that will cause an excursion above the State water quality standards. Through its compliance with the terms and conditions of the MS4GP, the Permittee will reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The MS4GP does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the

MS4 as disclosed in the permit application and/or NOI. Where small MS4 operators encounter particularly difficult pollutant control situations, the owner/operator may need to focus their implementation of control measures to address the situation, and may consider submitting an application for an individual NPDES permit as described in Section III.C.6 of this Fact Sheet.

- **Part 2.3** states that snow disposal directly into waters of the United States, or directly to the MS4s, is prohibited, due to concerns that the accumulated snow and melt water may contain elevated levels of chloride and other salts, suspended sediment, turbidity, and metals associated with sediment and turbidity. Discharges of snow melt resulting from or associated with the Permittees' snow management practices (such as street plowing, and/or application of traction material) are conditionally authorized, provided such activities are conducted in a manner that minimizes adverse water quality impacts in accordance with Permit Part 3.4 (*Pollution Prevention/Good Housekeeping for Municipal Operations*).

- **Part 2.4** states that storm water associated with industrial or construction activity (as defined in 40 CFR §122.26(b)(14) and (15)) may be discharged through the Permittee's MS4, provided that such discharges are authorized by the appropriate general NPDES permit, or a separate individual permit (as necessary).
- **Parts 2.5 and 2.6** define the types of discharges unrelated to precipitation events (i.e., "non-storm water discharges") that are conditionally allowed to enter into and discharge from the MS4s. Such allowable non-storm water discharges cannot be sources of pollution to the waters of the United States, consistent with the Idaho Water Quality Standards, as defined in MS4GP **Part 2.7**.[33] As described later in this document, Permit **Parts 2.8.4** and Part **3.5** further require all MS4 Permittees to prohibit, through ordinance or other enforceable means, all other non-storm water discharges into the MS4(s). Permittees are responsible for the quality of the discharges from their MS4, and therefore have an interest in locating and discontinuing any uncontrolled non-storm water discharges into

[33] Categories of non-storm water discharges listed in the MS4GP are consistent with those in 40 CFR §§ 122.34(b)(3)(iii). Additional text in MS4GP Part 2.6, beyond that in § 122.34(b)(3)(iii), is a result of input from IDEQ and the public on comparable provisions of prior MS4 permits in Idaho since 2006. Any discrepancy between allowable non- storm water discharges cited in a previously issued Idaho MS4 permit and the MS4GP is editorial, and the current version of the MS4GP prevails.

and from their MS4. To ensure that pollutants from non-storm water discharges are adequately controlled, Permittees should work cooperatively with other Permittees and use their illicit discharges management and public education activities to address such issues in their jurisdictions.

3. Permittee Responsibilities (MS4GP Part 2.8)

Permit Part 2.8.1 clarifies that each Permittee is independently responsible for permit compliance.

Permit Part 2.8.2 provides that Permittees may submit a joint NOI and participate in joint implementation as co-Permittees.[34] A written agreement between the parties is required to clarify agreed-upon roles and responsibilities. Several MS4 Permittees and operators in the Boise, Pocatello, Lewiston, and Coeur d'Alene UAs previously identified through permit applications their intention to operate as co-Permittees and/or to share storm water control measure implementation responsibilities. EPA strongly encourages regulated small MS4 operators to work cooperatively whenever possible to conduct the mandatory storm water management control measures in a cost effective and productive manner.

Permit Part 2.8.3 allows a Permittee to implement one or more of the control measures by sharing responsibility with an entity other than a regulated small MS4 Permittee.[35] The Permittee must enter into a written agreement with the outside party, in order to minimize any uncertainty about the entity's responsibilities to the Permittee. The Permittee remains responsible for compliance with the permit obligations in the event the other entity fails to implement the control measure (or any component thereof).

Permit Part 2.8.4 requires regulated small MS4 operators to maintain adequate legal authority to implement and enforce the required SWMP control measures as allowed and authorized pursuant to applicable Idaho law.[36] Without adequate legal authority, the MS4 operator is unable to perform many vital storm water management functions, such as performing inspections, requiring installation and proper operation of pollutant control measures within its jurisdiction, and/or enforcing such requirements.

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[34] See 40 CFR §§122.33(b)(1).

[35] See 40 CFR §122.35(a).

[36] See 40 CFR §§ 122.34(b)(3)(ii)(B), (b)(4)(ii)(A), and (b)(5)(ii)(B)); EPA 2010.

To control pollutants into and from the MS4, EPA expects all regulated small MS4 operators to fully use their existing legal powers in six specific ways. First, operators of regulated small MS4s must effectively prohibit and eliminate pollutants to the MS4 from illicit discharges and illicit connections. They must effectively control spills, dumping or disposal of non-storm water materials into the MS4. The MS4 operator must have the ability to control pollutants discharged from land disturbance and development activities occurring within their jurisdiction. The MS4 operator must be able to control the contribution of pollutants from one MS4 into another, through interagency agreements as necessary or appropriate. The MS4 operator must be able to require compliance with applicable rules within their jurisdiction. Finally, the regulated small MS4 operator must have authority to carry out inspection, surveillance, and monitoring procedures necessary to determine compliance with the MS4GP.

Different types of Idaho organizations qualify as regulated small MS4 operators, and EPA recognizes that each type of entity has different and unique legal powers under State law. The scope of such legal authority may include enforcement through statute, ordinance, policy, permit, contract, administrative order, and/or other means. Some Permittees cannot pass "ordinances," so their legal authority may consist only of policies, standards, or specific contract language. Other Permittees may not have the authority to impose a monetary penalty and/or may not recover remediation costs from violators.

Each Permittee must summarize their legal authorities in their Storm Water Management Program document required by MS4GP Part 2.8.5. The SWMP document must include a description of how they impose their existing legal authorities, and/or use cooperative agreements with neighboring jurisdictions, to implement the required storm water management control measures. This summary helps clarify to EPA and the public exactly how the individual Permittee implements the control measures required by the GP within their jurisdiction based on their unique legal powers under Idaho law.
EPA has reviewed information previously submitted by the regulated small MS4s listed in Appendix 1 of this Fact Sheet, and finds that regulated small MS4 entities in Idaho can maintain sufficient legal authority to impose and enforce the required control measure components within their jurisdictions.

Permit Part 2.8.5 requires each Permittee to develop, and annually update if necessary, a written SWMP document. The SWMP document explains how the Permittee intends to comply with permit requirements, implement its storm water management program, and

engage in the adaptive management process during the term of the permit.[37] The SWMP document (or documents) summarizes the physical characteristics of the MS4, describes how the small MS4 operator conducts the required SWMP control measures within its jurisdiction and should also describe any unique implementation issues such as cooperative or shared responsibilities with other entities. The SWMP document(s) address three audiences and purposes:

1) General Public – The written SWMP serves to inform and involve the public in implementation of the local storm water management program;
2) EPA and IDEQ - The written SWMP provides the permitting authority a discrete document to review to understand how the MS4 Permittee will comply with permit requirements and implement its storm water management program; and
3) Elected officials and local staff - The written SWMP can potentially be used by the Permittee as an internal planning document.

Details included in the Permittee's SWMP document(s) are not directly enforceable as effluent limitations of the GP. Therefore SWMP document(s) can be changed based on adaptations made during the course of the permit, such that the Permittee can react to circumstances and experiences on the ground and make adjustments to its program implementation to better comply with the permit. The fact that the SWMP is an external tool and is not required to describe enforceable permit requirements allows the MS4 Permittee to modify and retool its approach during the permit term to improve its compliance with the GP. EPA intends for all enforceable requirements to be articulated in the MS4GP; While the requirement to develop a SWMP document is an enforceable condition of the permit, the contents of the SWMP document and the SWMP document itself are not enforceable as effluent limitations of the permit. (Note that a Permittee may specifically request under MS4GP Part 2.9 that portions of its SMWP be incorporated into the permit as an alternative control measure; see discussion in Section II.D.4 below.) In general, because the details within the SWMP document are not enforceable permit terms, the MS4 Permittee may revise the SWMP as necessary to meet any permit requirements or to make improvements to storm water controls during the permit term, without requiring EPA to review and approve each change as a permit modification.[38]

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[37] See 40 CFR 122.34(b) and discussion of the relationship between the SWMP and required permit terms and conditions in EPA 2016(b) at pages 89339-89341. In contrast, the purpose of the Annual Report is to summarize the Permittee's activities during the previous reporting period, and to provide an assessment or review of the Permittee's compliance with the MS4GP.

[38] See EPA 2016b, page 89339-89341.

The SWMP document must be updated annually, submitted with the required Annual Report, and posted on the publicly available website required by MS4GP Part 3.6. MS4GP Appendix E provides a suggested format for the SWMP document; and EPA notes that several existing small MS4 Permittees have already developed such summary documents.[39]

Permit Part 2.8.6 requires the Permittee to track indicator statistics and information to document and report on SWMP implementation progress.

Permit Part 2.8.7 requires the Permittee to provide adequate financial support and staff capabilities to implement the SWMP control measures and other permit requirements. Each Annual Report must summarize the Permittee's annual expenditures for the prior 12-month reporting period. Permittees demonstrate compliance with Part 2.8.7 by fully implementing the requirements of the MS4GP.

The GP does not require specific staffing or funding levels, thus providing flexibility and incentive for the Permittee to adopt the most efficient methods to comply with permit requirements. EPA encourages Permittees to establish stable funding sources to support ongoing SWMP implementation, and enter into cooperative working relationships with other regulated small MS4s. Technical resources, such as EPA's Water Infrastructure and Resiliency Finance Center, are available to help communities identify sustainable funding solutions. EPA supports comprehensive long term planning to identify investments in storm water infrastructure and system management that complement other community development initiatives and promote economic vitality.[40]

Permit Part 2.8.8 requires each Permittee to extend their storm water control measures to all areas under their direct control when areas are annexed or transferred to another entity. Permittees must acknowledge or report changes in ownership or operational authority to

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[39] See, for example, SWMP plan documents authored by the City of Coeur d'Alene (http://www.cdaid.org/files/Engineering/Storm waterManagementPlan.pdf) City of Nampa (http://www.cityofnampa.us/DocumentCenter/View/1513) and Boise State University (http://www.partnersforcleanwater.org/media/182277/2014_boise_state_university_swmp.pdf)

[40] See: https://www.epa.gov/waterfinancecenter and other EPA long term planning resources at https://www.epa.gov/npdes/stormwater-planning

EPA and IDEQ through the SWMP document and Annual Reports, respectively. Permittees are reminded to make any associated revisions to MS4 system maps or other records as soon as possible.

4. Alternative Control Measure Requests (MS4GP Part 2.9)

The MS4GP establishes storm water management control measures for all eligible small MS4 permittee discharges upon the MS4GP effective date. In keeping with the Two Step General Permit process described in 40 CFR 122.28(d)(2), EPA will allow a MS4 permittee the discretion to submit one or more requests for Alternative Control Measures. Permittees may submit supplemental or individualized documents, plans, or programs that it deems to be equivalent to the comparable MS4GP provision, and information supporting the request, as an Amended Notice of Intent for coverage under the MS4GP. EPA will review all submitted Alternative Control Measure requests, and determine whether the Alternative Control Measure is acceptable and meets the MS4 standard established under the MS4GP. If EPA accepts the request, EPA will subsequently propose unique MS4 Permittee-specific requirements for public comment and hearing. Based on public comments received, EPA may then choose to formally modify the MS4GP to incorporate the unique MS4-related information as one or more enforceable permit provisions.[41]

E. Discussion of the Storm Water Management Program Control Measures *(MS4GP Part 3)*

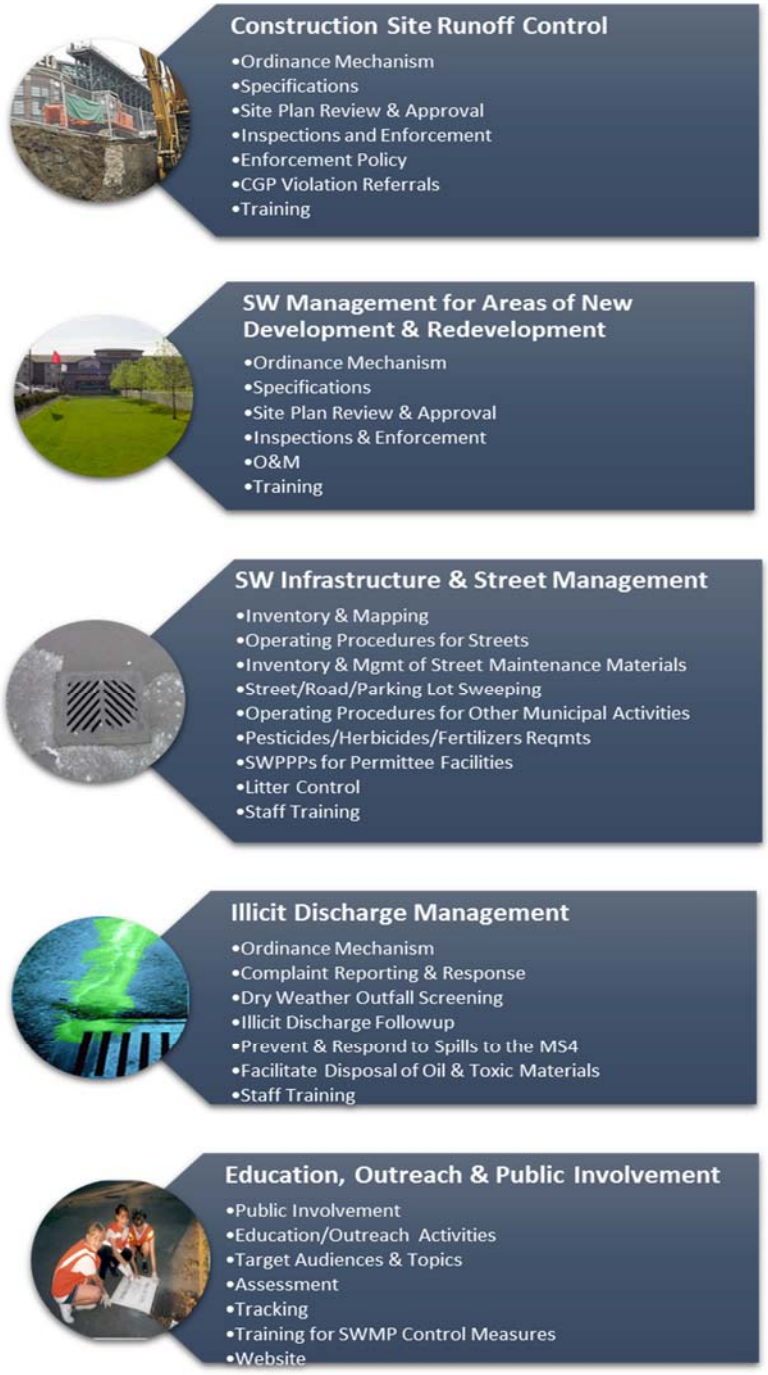
1. Overview

In the MS4GP Part 3, EPA has detailed clear, specific, and measurable requirements to address the minimum control measures in 40 CFR 122.34(a) and (b). Each minimum control measure is comprised of specific tasks, BMPs, design requirements, performance requirements, adaptive management requirements, schedules for implementation and maintenance, and/or frequency of actions. EPA refers to these specific actions and ongoing activities that comprise one of the minimum control measures as *program components.*

The previously issued individual MS4 permits in Idaho each required implementation of the applicable minimum SWMP control measures during the first permit term. Existing MS4 Permittees (listed in MS4GP Appendix A.1) have successfully implemented minimum control measures within their jurisdiction as articulated in their original permits (based on their specific legal authorities as authorized pursuant to applicable Idaho law). New MS4 permittees (listed

[41] EPA 2016b.

Table 2: ***MS4GP Minimum Control Measures and Associated Components***



in MS4GP Appendix A.2) submitted applications to EPA to describe their intended actions and activities, including estimated timelines for full SWMP implementation. EPA considered the existing SWMP programs, and the proposed programs submitted by the new permit applicants, during the development of the MS4GP terms and conditions.[42]

For existing MS4 Permittees, EPA has incrementally refined the specific components of each minimum control measure beyond the prior first term permit(s) to iteratively clarify EPA's expectations of what constitutes an adequate level of MS4 Permittee effort necessary to reduce pollutants from regulated small MS4s and meet the MS4 permit standard in Idaho.

For new MS4 Permittees, the MS4GP establishes appropriate storm water management expectations necessary to reduce pollutants from regulated small MS4s and meet the MS4 permit standard in Idaho.

EPA recognizes that each regulated small MS4 is unique and that each MS4 operator has different circumstances and capacities for storm water management and pollutant control. EPA seeks to balance the need for flexibility in how and when control measures are implemented with the need for clear, specific, and measurable permit requirements. EPA intends that all regulated small MS4s operators control pollutants in a manner that is broadly comparable, based on their specific legal authorities as authorized pursuant to applicable Idaho law. Due to the inherent human population densities in UAs, and national evidence of the accumulative impacts from urban settings on adjacent water bodies, each regulated MS4 Permittee must actively protect water quality by implementing appropriate storm water controls that complement similar actions imposed by neighboring regulated small MS4 jurisdictions. To sufficiently control pollutants in MS4 discharges, EPA determines it is both necessary and reasonable for the MS4GP to require the different types of regulated small MS4s in UAs within the State of Idaho to each employ a similar level of effort in order.

2. Compliance Dates (MS4GP Part 3.1)

In Part 3.1, EPA summarizes overall SWMP implementation expectations for both new and existing MS4 Permittees during the five year permit term. EPA clarifies that Existing MS4 Permittees must conduct their existing SWMP controls as they integrate and develop any revised or new activities to comply with the MS4GP requirements not later than XX. New MS4 Permittees must begin to develop their SWMP activities in compliance with the MS4GP no later

[42] See 40 CFR § 122.34(a)(2).

than the permit effective date, and are expected to fully comply with the MS4GP requirements not later than 180 days prior to the permit expiration date.

For each individual control measure subsequently identified in Permit Parts 3.2 through 3.6, EPA identifies applicable or unique compliance dates upfront as well as the date(s) by which any optional Alternative Control Measure request must be submitted. (For example, see Permit Part 3.2.1, Part 3.3.1, Part 3.4.1, etc.)

NPDES regulations allow a newly regulated small MS4 (including those small MS4 operators covered under the MS4GP for the first time) up to 5 years (i.e., the duration of the first full permit term) to fully implement the required SWMP control measures.[43]

3. Construction Site Runoff Control (MS4GP Part 3.2)

This SWMP control measure requires the regulated small MS4 operator to control construction site runoff discharges into their MS4s. See 40 CFR §122.34(b)(4). Discussion of specific control measure components is provided later in this section.

The expired individual small MS4 permits in Idaho required the existing Permittee to use an ordinance or regulatory mechanism to require proper construction site controls for sediment, erosion, and waste management at sites with land disturbance of one or more acres, (and also apply these controls to sites disturbing less than one acre, but that are part of a common plan of development that exceeds one acre.) As cited in 40 CFR 122.34(b)(4), the minimum control measures must also include procedures for site plan review that considers potential water quality impacts; procedures for site inspection and enforcement; and procedures for the receipt and consideration of information submitted by the public.

These requirements continue as mandatory components under the MS4GP. However, EPA believes that implementing construction site controls only at sites greater than 1 acre within the MS4 Permit Coverage Areas is insufficient to protect water quality in Idaho. Therefore, EPA has expanded the scope of this control measure to better reduce pollutant loading of sediment and nutrients within the MS4 Permit Coverage Areas. Specifically, the MS4GP requires the small MS4 Permittee to implement and enforce their construction site runoff control program requirements in an appropriate manner to reduce the discharge of pollutants and control runoff from construction activity that results in land disturbance of 5,000 square feet (ft^2) or more.

[43] See: 40 CFR §§122.34(a)(1) and 123.35(e).

EPA is using its discretion to revise the site disturbance size threshold triggering local requirements for construction site runoff controls from "*sites disturbing one acre or greater… including construction activity disturbing less than one acre if the construction is part of a larger common plan of development of sale that would disturb one acre or more"* to "*sites disturbing 5,000 ft^2 or more"* to better protect water quality across the state of Idaho. All urban water bodies are deserving of such increased protection from sediment and nutrients, and EPA is expanding the scope of the MS4 Permittee's local controls for erosion, sediment, and construction site waste management to be imposed at a greater number of construction for the following reasons:

- All regulated small MS4s in Idaho (except in the Idaho Falls UA) discharge to waterbodies impaired for sediment, siltation, nitrogen, and/or total phosphorus. Requiring appropriate construction site level controls at more sites within MS4 Permit Coverage Areas discharging into impaired waters is consistent with assumptions and requirements of the applicable TMDLs and TMDL implementation plans in these UAs. Each of the applicable TMDLs call for and expect regulated MS4 operators to better control total suspended sediments and/or nutrients. Controlling pollutants in runoff from additional construction sites within the MS4 Permit Coverage Area will more broadly prevent sediment-laden runoff, and will more effectively contribute overall to the attainment of Idaho Water Quality Standards in the all impaired receiving waters listed in Appendix 5 of this Fact Sheet.

- Requiring appropriate construction site level controls at more sites within MS4 Permit Coverage Area surrounding Idaho Falls will serve to appropriately protect the good water quality that currently exists for the Snake River and its tributaries within the Idaho Falls UA.

- Establishing reasonable and appropriate erosion, sediment, and onsite waste management control expectations at most, if not all, active construction sites in the Permittee's jurisdiction is an effective way prevent these common pollutants from reaching receiving waters via discharges through the MS4. Because each MS4 Permittee is unique, it is appropriate for the MS4 Permittee to determine the appropriate scope and extent of such erosion, sediment, and onsite waste management controls based on site size, type of construction, location/distance from the MS4, and/or other relevant factors.

- Merely using a site size threshold of "1 or more acres" to trigger the construction runoff controls in regulated small MS4 jurisdictions impacts very few individual construction sites within UAs. Approximately 41% of the single family residential lots in the Western

United States are 7,000 square feet or less.[44] In order to comprehensively prevent pollutants from the wide variety of construction activities occurring within the MS4 Permit Coverage Area, it is necessary that MS4 Permittees specify reasonable erosion, sediment, and waste management controls for disturbance areas at a greater number of construction sites.

EPA recognizes that not all construction activity requires using the same level of erosion or sediment controls, or require the same inspection type or frequency, and/or needs to receive the same level of local oversight. Smaller -scale construction projects do not require the same level of upfront planning, plan detail, or site plan review. Requiring regulated small MS4s in Idaho to use their local authority to control the common pollutants of concern from construction activities that disturb less than 1 acre using cost-effective and appropriate BMPs is a reasonable and incremental improvement to the existing small MS4 construction runoff control programs in Idaho.

For example, erosion and sediment control at a single residential lot, or portion of a lot, generally requires less rigorous detail, because such projects can manage with basic (but effective) prevention-type BMPs. Moreover, because the projects are relatively small, land disturbance activities tend to be completed relatively quickly, often during drier seasons of the year.

As another example, EPA believes that a MS4 Permittee could augment their existing ordinances by using a simpler, checklist format as documentation of applicable controls for these less-than-one-acre disturbance construction sites that may discharge into their MS4. A simple list of acceptable controls can be provided in a quick and relatively concise manner to project proponents by the Permittee in regulated small MS4 jurisdictions.

EPA expects that regulated small MS4 operators use their discretion to prioritize and scale their applicable site plan review procedures, site inspections, and enforcement activities as appropriate to their jurisdiction. EPA expects MS4 Permittees to prioritize construction activities based on consideration of the project type, size, and relative risk to receiving waters.[45]

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[44] See: http://www.census.gov/construction/chars/pdf/lotsize.pdf

[45] See EPA 2015b.

For these reasons, EPA believes that revising the mandatory site disturbance runoff control program threshold for the construction site runoff control program, from "1 acre or more" to a threshold of 5,000 ft^2 across all MS4 Permit Coverage Areas of Idaho, is reasonable and practical way to ensure appropriate erosion, sediment and waste management controls at construction sites in highly urbanized watersheds.

Permit Part 3.2.1 provides a compliance deadline of four years and six months from the permit effective date for MS4 operators to update their existing construction site runoff control program, if needed, and/or to impose the new program components, within the Permit Area. This timeframe allows sufficient time for all Permittees to work with their stakeholders as necessary to amend existing local requirements if needed. Many existing MS4 operators already impose appropriately-scaled erosion and sediment control expectations on construction sites that disturb less than 1 acre.[46] If the Permittee must revise their existing program to impose an appropriate level of erosion & sediment control expectations on smaller disturbance areas, EPA recognizes that different levels of effort will likely be necessary depending on the type of Permittee/MS4 operator. For example, a city may need more time to revise a local ordinance, whereas a highway district, college or university may need comparably less time to amend its applicable contract or policy language. EPA anticipates that regulated small MS4 operators within the same UA will work together in a cooperative manner to define appropriately-scaled and reasonable construction site control expectations, to find efficiencies, and to speed implementation.

Permit Part 3.2.2 outlines the expected scope of the MS4 operator's program to reduce and prevent runoff from construction sites disturbing 5,000 square feet (ft^2) or more, including the enforcement of an ordinance or other regulatory mechanism that requires some level of sediment, erosion, and waste management controls at construction sites meeting the disturbance threshold, and includes sanctions to ensure compliance.

Permit Part 3.2.3 requires written specifications to define the appropriate site level controls for construction activities within the Permittee's jurisdiction. EPA clarifies that the type and extent of site-level erosion, sediment, and waste management controls will likely be different depending on site size and location, and the Permittee has the discretion to determine how best to control sediment and other pollutants in runoff from these small sites. A residential construction project disturbing 5,000 ft^2 occurring on flat ground adjacent to the MS4 likely requires substantially different controls than a commercial

[46] For example, Pocatello, Chubbuck, Nampa, Caldwell, Coeur d'Alene, and Post Falls each require erosion & sediment controls at any construction site within their jurisdiction. See EPA's *Permittee Summary Information* in the Administrative Record.

construction project disturbing 40,000 ft^2 on sloped ground adjacent to the MS4, and it is therefore reasonable for the Permittee to recognize such differences within its written specifications and other local requirements. Based solely on disturbance, neither hypothetical site would trigger the need for the statewide NPDES Construction General Permit; however, smaller construction sites are common in urban communities and demonstrate evidence of strong local economies. To adequately protect water quality and reduce discharges of pollutants from the regulated small MS4, EPA determines that it is appropriate for Permittees to require an appropriate level of pollutant controls at active construction sites within their communities.

Permit Part 3.2.4 requires a preconstruction site plan review and approval process that includes consideration of public input.

Permit Part 3.2.5 requires the Permittee to conduct prioritized construction site inspections and to enforce the applicable local requirements as needed.

Permit Part 3.2.6 requires the Permittee to develop a written enforcement response policy to guide and prioritize such oversight, inspection, and enforcement efforts.

The Permittee may refer to EPA any information about site operators at construction disturbing 1 or more acres that fail to comply with locally applicable requirements. For construction project sites that are subject to the Idaho CGP but that do not sufficiently respond to Permittee's educational, compliance, or enforcement efforts by failing to control pollutant discharges into their MS4, the Permittee may refer CGP-related site information to the EPA NPDES Compliance Hotline in Seattle, Washington, by telephone, at (206) 553-1846. Such referrals should include relevant information describing, at a minimum: the construction project location and description; name and contact information of project owner/operator; estimated construction project disturbance size; and information which describes the Permittee's prior interaction with the site operator regarding the applicable requirements.

EPA clarifies that the MS4 Permittees are not expected to enforce the statewide NPDES General Permit on EPA's behalf. EPA expects Permittees to enforce their own local construction site runoff control requirements to the best of their abilities via ordinances or other regulatory mechanism in order to reduce pollutants in discharges from their MS4 and to protect water quality.

Permit Part 3.2.7 requires the Permittee to provide proper training for construction staff conducting plan review and inspection, and to allow opportunity for site operators who

work in the MS4 service area to learn how to comply with local requirements. Training and educational efforts are the keys to ensuring that BMPs are appropriately used at active construction sites within the Permittee's jurisdiction.

4. Storm Water Management for Areas of New Development and Redevelopment

Permit Part 3.3 requires regulated small MS4 Permittees to implement and enforce a program to control runoff from new development and redevelopment project sites, including projects involving streets and roads. In the previously issued small MS4 permits for Idaho, these requirements were entitled *Post-Construction Storm Water Management in New Development and Redevelopment.* These prior small MS4 permits required such controls to be imposed at sites disturbing 1 or more acres, by directing the Permittee to address runoff from new development and redevelopment projects, using a locally appropriate combination of structural and/or non-structural BMP requirements.[47] The MS4 Permittee is also required to enforce the requirements using an ordinance or other regulatory mechanism, to the extent allowable under state or local law, and to ensure the adequate long-term operation and maintenance of these BMPs.[48]All existing MS4 Permittees cited in Appendix 1 of this document are adequately implementing their existing post-construction storm water management programs, pursuant to their previously issued MS4 permits.

In the MS4GP, EPA has revised the title of the control measure in Permit Part 3.3 to *Storm Water Management for Areas of New Development and Redevelopment,* to reflect EPA's current expectations with regard to implementation of the measure. EPA uses the term "permanent storm water controls" in the MS4GP instead of "post-construction storm water management controls" to mean those controls that will treat or control pollutants in storm runoff from the development site on a permanent basis once construction is complete. This control measure requires the MS4 Permittee to continue to enforce a program to address post-construction (aka, permanent) storm water runoff from areas of new development and redevelopment occurring in their jurisdiction.

As previously explained, EPA believes that it is necessary to require site level storm water management controls at a greater number of sites within densely populated urban watersheds. Therefore, EPA has established a site disturbance threshold to trigger the application of

[47] "Non-structural requirements" include, but are not limited to, planning, zoning, and other local requirements such as buffer zones. "Structural controls" include, but are not limited to, the use of storage, infiltration basins, or vegetative practices such as rain gardens or artificial wetlands. *See*: 40 CFR§122.34(b)(5)(iii).

[48] See EPA 2012; EPA 2009; 40 CFR §122.34(b)(5).

appropriate permanent storm water control requirements, from "*sites disturbing 1 or more acres,*" to "*sites disturbing 5,000 ft^2 or more*."

EPA is also proposing that the small MS4 Permittee implement an onsite storm water management design standard for new development and redevelopment sites in order to prevent the creation of excess storm water discharges- and pollutant loadings- from the additional impervious surfaces associated with the urban development. Use of onsite storm water management controls at new development and redevelopment sites proactively protects Idaho receiving waters, and ensures that such water quality protections continue over the long term.

It is well understood that uncontrolled runoff from new development and redeveloped areas negatively affects receiving water bodies.[49] Pavement and other impervious surfaces in urban settings prevent infiltration, and the resulting runoff increases in both volume and velocity, which in turn causes the erosion of stream banks and scouring of streambeds. Fine sediments and pollutants from automobiles, landscape pesticides, and fertilizers enter nearby streams, and can damage fish spawning areas and other aquatic habitat. Traditional storm water management practices typically employ engineered, end-of-pipe practices, which tend to control only peak flow rates and total suspended solids concentrations. Such conventional practices fail to address the widespread and cumulative hydrologic modifications within an urban watershed that increase storm water volumes and runoff rates, and cause excessive erosion and stream channel degradation. Traditional practices also fail to treat for pollutants typically found in urban settings, such as nutrients, pathogens, and metals.[50]

Individual controls on storm water discharges can be inadequate when used as the sole solution to storm water in urban watersheds. Instead, storm water control measures that involve prevention- such as product substitution and better site design, downspout disconnection, and conservation of natural areas - as well as watershed and land use planning, can dramatically reduce both the volume of runoff and pollutant loads from new development. In particular, site-level storm water control measures that harvest, infiltrate, and evapotranspire storm water are critical to reducing the volume and pollutant loading associated with small storms. [51]

"Green Infrastructure" (GI) or "green storm water infrastructure" (GSI), are terms used to describe the type of long-term storm water management techniques that are cost-effective,

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[49] EPA 1985.
[50] Shaver, et al., 2007. Holz, 2008; and Horner, 2008.
[51] NRC 2008.

sustainable, and environmentally friendly. Such techniques, including site level "Low Impact Development" (LID) practices, at new development or redevelopment projects involve both storm water management and land development strategies emphasizing conservation and integration of natural features with small scale engineered hydrologic controls to more closely mimic predevelopment hydrologic function. A comprehensive approach to long-term storm water management using GI, GSI, and LID seeks to:

- Preserve, protect and enhance natural landscape features, such as undisturbed forests, meadows, wetlands, and other undisturbed areas that provide natural storm water management;
- Reduce overall land consumption, and use land efficiently, to reduce total watershed or regional impervious cover;
- Recycle land by directing new development to already degraded land, e.g., parking lots, vacant buildings, abandoned malls; and
- Direct storm water into the ground near where it fell through infiltration, prevent rainfall from falling to the ground through interception, return water back to the atmosphere through evapotranspiration, and/or otherwise manage storm water through reuse techniques.[52]

Since 2008, EPA has nationally advocated for local jurisdictions to employ a volume-based approach to storm water management at new development and redevelopment sites. This approach includes requirements for the design, construction, and maintenance of permanent storm water practices that manage rainfall on-site, and generally prevent the off-site discharge of the precipitation from all rainfall events below a certain size. EPA considers a volume-based storm water management approach to be appropriate in the MS4GP for Idaho because it directly addresses the need to maintain and, where necessary, to restore the predevelopment hydrology for duration, rate, and volume of storm water flows. Further, such techniques are widely acknowledged as a means of preventing pollutants from entering the receiving water in the first place.

Many GSI/LID strategies involve bioretention, or infiltrating runoff through soil. Bioretention practices include use of porous pavements, green roofs, bioswales, and rain gardens. Various studies confirm the effectiveness of GSI/LID practices to reduce contaminants, restore hydrology, and protect the health of aquatic species. Research and on-the-ground experience

[52] See: American Rivers 2013; EPA 2006; EPA 1999, at pages 68725 – 68728 and 68759; EPA, et al., 2007; and EPA 2009.

suggests that all LID practices can perform efficiently as long as procedures for proper design, implementation, and maintenance are followed.[53]

Many small MS4 permittees in Idaho currently require onsite retention and infiltration practices at development sites within their jurisdictions, and integrate aspects of a GSI/LID approach for such new development and redevelopment sites. While existing small MS4 permittees became familiar with controlling storm water on new development and redeveloped sites during the previous NPDES permit term, EPA is now requiring a consistent, statewide approach to deal with post-construction storm water discharges. Such an approach is warranted because storm water from UAs in Idaho continues to contribute to impaired water quality in adjacent receiving waters, and such onsite management techniques can effectively mitigate these impacts in urban watersheds.

In other small MS4 Permits in the Pacific Northwest, EPA determined that a 95th percentile storm event volume is an appropriate design target for new development sites, because such as design target provides onsite management for the majority of smaller sized storms typically occurring within the geographic area of permit coverage, and ensures that only the largest storms generate runoff from such sites. In addition, this approach encourages site designers to consider natural treatment and flow attenuation methods that are demonstrated to be both reasonable and practicable techniques to control pollutants.

The MS4GP requires that all regulated small MS4 permittees in Idaho incorporate onsite storm water management into their local design guidelines to effectively manage the total rainfall volume from the calculated 95th percentile storm event for their geographic area. This requirement is meant to enhance the site design specifications, guidelines, and other policy documents that are currently required by existing and new small MS4 permittees. Developed land changes the hydrology of sites, leading to higher storm water discharge volumes and higher pollutant loads. The purpose of this design standard is to help maintain or restore stable hydrology in nearby receiving waters, and to better protect water quality from the impacts of post-construction storm water flows from development within the Permit Area. The provision provides a consistent, statewide performance expectation for storm water management at new development and redevelopment sites across all regulated small MS4 areas of the State.

EPA acknowledges that, in certain locations, onsite management of the total volume of storm water may not be technically feasible. Therefore, EPA recognizes that the Permittee may need

[53] For example, see: Ahiablame, et al, 2012; Spromberg, J.A. et al. 2016; and McIntyre, J.K, et al. 2016.

to allow alternative storm water mitigation or treatment requirements, in lieu of compliance with the calculated onsite storm water management design standard. MS4 Permittees may use the opportunity to request that EPA acknowledge an Alternative Control Measure for their jurisdiction, provided that Alternative Control Measure is demonstrated to meet or exceed the expected site level pollutant control equivalent to effective management of the 95th percentile storm event volume.

For example, alternative local compliance with the Permittee's storm water management design standard could take the form of off-site mitigation or payment in lieu programs. The Permittee could consider creating an inventory of appropriate alternative storm water management techniques, and/or using planning mechanisms (such as completed sub-watershed plans or other appropriate means) to identify priority areas within sub-watersheds of their jurisdiction(s) where off-site mitigation, and/or public storm water mitigation projects, may be implemented. The Permittee should then consider institutional standards and management systems to value, estimate, and track these situations. If off-site mitigation is used as an option for project proponents to comply with the Permittee's onsite retention standard, it should ideally apply only to redevelopment sites, not to new development sites. Before allowing an offsite mitigation option, the Permittee should also establish and apply criteria for determining the circumstances under which offsite mitigation is allowed, and identify priority areas within the MS4 drainage area where such off-site mitigation projects can occur. Finally, EPA recommends the Permittee also consider addressing the responsibility for long-term maintenance of such mitigation projects. To the extent allowable under Idaho State law, Permittees could also consider "payment in lieu" program, wherein payment is made by the project proponent to the Permittee, who then applies the funds to a public storm water project.

The *95th percentile rainfall event* is the rainfall event that is greater than 95% of all rainfall events over a period of record (typically > 30 years). This calculation excludes small rainfall events that are 0.1 of an inch or less (because small rainfall events, in general, do not result in any measurable site runoff due to absorption, interception, and evaporation by permeable, impermeable, and vegetated surfaces).[54] The MS4GP requires the regulated small MS4 Permittee to use their local ordinances or regulatory mechanisms to require the volume of water from storms less than or equal to the 95th percentile event to be managed entirely onsite, and not discharged to surface waters, in order to fully protect water quality in the receiving waters of Idaho.

[54] See: Hirschman and Kosco, 2008.

As an example, EPA used available information from the National Oceanic and Atmospheric Administration representing the 24-hour precipitation data through 2012 to analyze the average rainfall depth occurring within the Permit Areas of the MS4GP. See Table 4. Statewide, approximately 95% of all storms occurring in the MS4GP Permit Areas result in approximately 0.82 inches or less, and range between an estimated 0.57 inches to 0.82 inches.

Table 3: ***Analysis of the 95th Percentile Storm Runoff Volumes for Idaho MS4 Permit Areas***

Urbanized Area/ Permit Area	Rainfall Depth (in)	NOAA Station Location; Period of Record
	95th	
Coeur d' Alene	0.81888	*COEUR D ALENE, ID (GHCND:USC00101956); 1895-2012*
Moscow	0.8188	*MOSCOW U OF I, ID (GHCND:USC00106152); 1893-2012*
Caldwell	0.6102	*BOISE AIR TERMINAL, ID (GHCND:USW00024131); 1940-2012*
Nampa	0.5708	*NAMPA 2 NW, ID US ZIP:83687; 1948-2012*
Boise	0.6102	*BOISE AIR TERMINAL, ID (GHCND:USW00024131); 1940-2012*
Lewiston	0.6299	*LEWISTON NEZ PERCE CO AIRPORT, ID (GHCND:USW00024149); 1940-2012*
Pocatello	0.6495	*POCATELLO REGIONAL AIRPORT, ID (GHCND:USW00024156); 1939-2012*
Idaho Falls	0.688	*IDAHO FALLS, ID 83402 ZIP:83402; 1913-2012*

To accommodate the predicted, incremental increase in storm event volumes over time, EPA believes it is appropriate to establish the statewide design standard for onsite retention in the MS4GP as a calculated runoff volume (i.e., as the runoff volume associated with the 95th percentile storm). EPA believes that such an expression is preferred over a static, specific rainfall amount (e.g., "0.6 inches total rain") or a stated volume calculated from a statistical storm frequency return interval that is based on historic rainfall data. Using the climate change projections in the EPA's *Climate Resilience Evaluation and Analysis Tool* (CREAT), EPA evaluated the extreme storm event return interval for 24-hour storm events in each of the Phase II small MS4 Permit Areas covered by the Idaho MS4GP.[55] These projections reflect the changes in

[55] The *Climate Resilience Evaluation and Analysis Tool* (CREAT) is the EPA-developed software to assist drinking water and wastewater utility owners and operators in understanding potential climate change threats, and in assessing the related risks at their individual utilities; it is available online at

climate conditions for 30-year averages centered around the years 2035 and 2060, compared to historical or present-day climate conditions under a variety of scenarios. Under all climate scenarios, the predicted trends for all Phase II small MS4 Permit Areas covered by the MS4GP demonstrate a general increase in ambient temperatures throughout the year, as well as increased magnitudes of storms for all return frequencies (i.e., the 5 year, 10 year,…,and 100 year events). The projections also suggest a significant decrease in summer precipitation throughout the state, balanced by increased precipitation in other seasons. In anticipation of this incremental predicted climate change, EPA believes it to be more effective to express a design standard for onsite storm water retention as a calculated runoff volume in order to define the long term performance expectation for increased water quality protection.

EPA encourages small MS4 permittees to explore the use of multiple techniques as a possible means to control runoff volumes from new development and redevelopment sites in their areas. Techniques like water reuse, and/or water harvesting, in addition to infiltration techniques, are likely feasible and appropriate in certain areas of the state. EPA believes that a design standard target for new development and redevelopment sites, requiring the capture of runoff volumes representing the 95th percentile storm calculated for that specific area, will enhance the long-term water quality protection by reducing pollutant loadings into the impaired receiving waters listed in Appendix 5 of this Fact Sheet.

Other components of this control measure include:

Permit Part 3.3.1 establishes a compliance deadline of 4.5 years from the permit effective date for MS4 operators to update their existing runoff control program, and/or to impose the new program components, within the Permit Area. EPA believes this timeframe is justified to allow small MS4 Permittees to adjust their existing programs as necessary to apply the provisions on a wider range of projects within the Permit Area.

Permit Part 3.3.2, as explained above, requires the small MS4 permittee to update their ordinance or other regulatory mechanism to incorporate an onsite retention standard for new development and redevelopment sites that disturb 5,000 ft^2. The provision allows for alternative mitigation or treatment alternatives in situations where complete onsite retention of the target volume is infeasible. To clearly and specifically articulate this provision, EPA has included definitions of the terms “infeasible” and “practicable” in MS4GP Part 8.

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http://water.epa.gov/infrastructure/watersecurity/climate/creat.cfm. EPA Region 10’s analysis of the extreme storm event return interval for the Idaho MS4GP Permit Areas is available as part of the Administrative Record.

Permit Part 3.3.3 requires the Permittee to maintain written specifications for the approved or acceptable permanent storm water controls for their jurisdiction**.**

Permit Part 3.3.4 requires the Permittee to review and approve site plans for permanent storm water controls. Specific standards are a critical component of the program, but even the best local requirements must be supported by a review component to ensure that the locally established performance standards are met. To comply with this requirement, the Permittee must have the authority to withhold approvals when it determines that the site has not been designed to meet the applicable storm water control standards.

Permit Part 3.3.5 outlines the requirement for the Permittee to inspect and enforce their requirements for permanent storm water controls. Inspection of permanent control measures is key to ensuring the protection of water quality. Without periodic inspection or maintenance, the permanent control measures can become pollutant sources, rather than a means of reducing pollutants. An effective local inspection process, combined with appropriate corrective enforcement if necessary, helps to ensure that onsite controls are built according to approved plans and specifications, and that proper materials and construction techniques are used.

Permit Part 3.3.6 addresses the requirement to ensure the long-term operation and maintenance of permanent storm water controls. EPA suggests the Permittee use a database inventory to track and manage the operational condition of permanent storm water controls within its jurisdiction. This can take the form of a computerized maintenance management system or asset management system that allows for the electronic logging of O&M tasks. Ongoing maintenance is necessary to ensure that the BMPs will continue to perform as designed. Inadequate maintenance of existing storm water management controls is the primary shortcoming for most local storm water programs across the country. As with any infrastructure, deferred maintenance can increase costs and negatively affect receiving waters. Unmaintained BMPs will ultimately fail to perform their design functions, and can become a nuisance and/or pose safety problems.[56]

Permit Part 3.3.7 requires the Permittee to ensure that both their staff and appropriate local audiences are sufficiently educated regarding the selection, design, installation, operation, and maintenance of permanent storm water controls.

5. Pollution Prevention/Good Housekeeping for Municipal Operations, Infrastructure

[56] *Citation needed here*:

Management, and Maintenance (MS4GP Part 3.4)

Municipal operation and maintenance is an integral part of any storm water management program, and, when coupled with good housekeeping and pollution prevention principles, reduces the risk of water quality problems from MS4 discharges. The minimum requirements for this control measure are outlined in the federal regulations for Phase II regulated small MS4s at 40 CFR §122.34(b)(6). These provisions require the implementation of an operation and maintenance program that includes a staff training component, and articulates as its goal the prevention or reduction of pollutant runoff from municipal operations. EPA has retitled this mandatory requirement as *Pollution Prevention/Good Housekeeping for Municipal Operations, Infrastructure Management, and Maintenance* in acknowledgement of the broad and inclusive scope of this minimum control measure.

Existing MS4 Permittees have been required to develop and implement an operation and maintenance program "intended to prevent or reduce pollutant runoff from municipal operations;" to develop an employee training program; and to prepare site-specific storm water pollution prevention plans (SWPPPs) at the Permittee's own maintenance buildings and similar facilities.

Permit Part 3.4 requires that all Permittees properly operate and maintain their MS4s, associated Permittee-owned/operated facilities, and related activities, to prevent or reduce the discharge of pollutants from the MS4. EPA is using its discretion to further clarify the expectations for this control measure by adding more explicit provisions that address the operation and maintenance of specific municipal activities. Because roads and streets function as an integral part of the drainage conveyance systems in urban Idaho areas, EPA is adding specific provisions for appropriate storm water management through operation and maintenance activities for roads and streets.

In the previously issued small MS4 permits for Idaho, EPA included the requirement for mapping the MS4 pipes and outfalls in the permit section related to illicit discharge detection and elimination. Because maintaining an updated map of the MS4 directly reflects the overall understanding and management of the storm water/MS4 infrastructure, EPA moved the requirement for MS4 mapping into this section of the MS4GP.

All small MS4 Permittees must continue to focus on maintenance of their Permittee-owned portions of the MS4s to protect water quality. Because of the diverse nature of the Permittees' MS4 facilities (which include the streets and parking lots, but also storm water ponds, underground pipes, drainage ditches, etc.), appropriate procedures and schedules for inspection and maintenance are necessary for each type of infrastructure/facility. The operating procedures should include some manner or protocol for testing and safely disposing

of any waste materials collected from catch basins or other infrastructure and any associated decant water.

Individual program components of the Pollution Prevention/Good Housekeeping control measure that EPA believes to be reasonable and important Permittee responsibilities, are summarized below:

Permit Part 3.4.1 establishes a compliance deadline of 180 days from the expiration date for all small MS4 operators to update their existing runoff control program(s), and/or to impose any new program components, within the Permit Area. EPA believes this timeframe is justified to allow Permittees adequate opportunity to adjust their existing programs, as necessary, and ensure the required actions are sufficiently addressed within the Permit Area.

Permit Part 3.4.2 continues to require all small MS4 Permittees to maintain a current MS4 map, and has added a requirement for an accompanying MS4 Inventory of the features that comprise the MS4 system.

EPA has refined the expected content of the MS4 Outfall Map and Inventory, and requires these updated materials be submitted to EPA as part of the 4th Year Annual Report. The purpose of the MS4 outfall inventory is to record and verify outfall locations, as well as other descriptive characteristics of the system. EPA expects that each MS4 operator knows the locations and characteristics of all outfalls that it owns/operates, as well as where those outfalls. Permittees are encouraged to couple this inventory with the dry weather screening and investigation requirements in the subsequent Permit Part 3.5.

Permit Part 3.4.3 outlines EPA's expectations for the inspection of all small MS4 Permittee catch basins and inlets at least every two years, and requires appropriate cleaning and/or maintenance action based on those inspections.

Permit Part 3.4.4 requires small MS4 Permittees to review and update their operation and maintenance procedures for streets, roads, highways and parking lots comprising more than 3,000 square feet of impervious surface, and that are owned, operated, and/or maintained by the Permittee. Such review of the applicable O&M procedures will ensure such actions are, or continue to be, protective of water quality and reduce the discharge of pollutants through the MS4.

Permit Part 3.4.5 requires Permittees with street maintenance responsibilities to ensure that road material stockpiles (such as sand, salt, or sand with salt stockpiles) are managed in a manner that prevents pollutants in runoff from discharging to the MS4 or into any

receiving waterbody. Permittees without street maintenance responsibilities do not have an obligation to comply with this provision. An inventory of all such street materials must be maintained. Prior to the permit expiration date, the Permittee must assess each of their storage locations for water quality impacts, and must describe any structural or non-structural improvements made by the Permittee to prevent runoff from discharging into the MS4 or directly into a receiving water.

Permit Part 3.4.6 requires the Permittee with street, road, highway and parking lot responsibilities to document the adequacy of their sweeping activities through a sweeping management plan. Permittees without street maintenance responsibilities do not have an obligation to comply with this provision.

Permit Part 3.4.7 requires Permittees to review and update their operation and maintenance procedures for other municipal activities, to ensure such procedures protect water quality and reduce the discharge of pollutants through the MS4.

Permit Part 3.4.8 requires the Permittees to ensure that their staff, and others operating in public areas owned or operated by the Permittees, are appropriately handling the use of pesticides, herbicides, and fertilizers.

Permit Part 3.4.9 requires Permittees to manage onsite materials at their maintenance yards and to prevent pollutants in storm water runoff through use of storm water pollution prevention plans (SWPPPs). Plans developed for such locations can use the basic SWPPP framework identified in various EPA guidance materials, and may follow a "template plan" to establish basic requirements that can be tailored to the location/responsible staff.

Permit Part 3.4.10 establishes expectations for the Permittee to work cooperatively towards the sufficient control of trash and litter within the Permit Area, to prevent the conveyance of material through the MS4. This provision complements the requirements of Part 3.5.

Permit Part 3.4.11 requires the Permittee to ensure appropriate training for responsible staff such that operation and maintenance activities are conducted properly and with attention to potential water quality impacts.

6. Illicit Discharge Management (MS4GP Part 3.5)

Permit Part 3.5 contains requirements for the MS4 Permittee to address illicit discharges and spill response within their jurisdiction. At a minimum, EPA requires the regulated small MS4 operator to maintain the ability to prohibit, detect, and eliminate illicit discharges from the

MS4. In addition, the MS4GP reinforces the expectation that Permittees can respond to spills that enter their MS4.

The purpose of this control measure is to provide ongoing surveillance and deterrence of pollutant loadings caused by illicit discharges into the Permittee's MS4. Illicit discharges can enter a MS4 through direct connections (*e.g*., wastewater piping mistakenly or deliberately connected to the storm drains), or through indirect connections (*e.g.,* infiltration into the MS4 from cracked sanitary systems, spills collected by drain inlets, or discarded paint or used oil dumped directly into a drain). Both types of illicit discharge can contribute excessive pollutants into the MS4, and in turn can negatively affect water quality. Investigating for and eliminating such illicit discharges from entering the MS4 improves water quality.

Previously issued MS4 permits in Idaho contained the four required Illicit Discharge Detection and Elimination (IDDE) program components, based on the regulations at 40 CFR §122.34(b)(3). These components broadly require the MS4 operators to conduct the following activities to manage illicit discharges into the storm drain system:

- Maintain a map of the MS4 showing the location of all outfalls and names of the receiving waters; (as previously discussed, EPA has moved the requirement to maintain a map of the MS4 to MS4GP Part 3.4.2.);

- Effectively prohibit discharges of non-storm water to the MS4 through the use of an ordinance or other regulatory mechanism, and provide for enforcement of that prohibition as needed;

- Develop and implement a program plan to detect and address non-storm water discharges, including procedures to identify problem areas in the community, determine sources of the problem(s), remove the source if one is identified, and document the actions taken; and

- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste, and publicize appropriate public reporting of illicit discharges when they occur.

Each of the existing MS4 Permittees has an established program to prohibit, detect, and respond to illicit discharges, as appropriate to their jurisdiction and overall responsibilities. In the context of the MS4GP, EPA encourages new and existing MS4 Permittees to work together to share expertise and knowledge in order to fully implement this control measure within their shared MS4 Permit Coverage Areas.

Existing MS4 Permittees must continue, and new Permittees must develop, an illicit discharge complaint reporting and response program that includes community education and detailed response procedures. EPA expects these programs can be promoted to the public in concert with the public education requirements in Permit Part 3.6.

Existing MS4 Permittees currently have systems and protocols in place to track calls from citizens, and to direct reports of discharges/dumping to appropriate staff and/or emergency response authorities. Staff assigned to handle calls should be trained in storm water issues and emergency response in order to gather and transfer the right information to responders. Conducting an investigation as soon as possible after the initial complaint report is crucial to the success of this program.

Sources of illicit discharges are often intermittent or mobile, yet the frequency or severity of such discharges can have lasting effects on water quality. The nature, extent, and conclusions of each inspection should be recorded with the original complaint to provide a full picture of each incident. This information provides detailed information about the types and locations of discharges, their possible sources, and other information pertinent to targeting future inspection, outreach, and education activities. Additionally, a complete file documenting an incident can provide better evidence in cases where a citation or civil penalty is needed.

In Permit Part 3.5, EPA defines specific elements for appropriate illicit discharge management by MS4 operators. The individual program components are described in the following paragraphs:

Permit Part 3.5.1 establishes a compliance deadline of two years from the permit effective date for MS4 operators to update their existing illicit discharge program activities, and/or to fully impose the new program components. New MS4 Permittees may use this compliance date as a target for full implementation within the permit term.

Permit Part 3.5.2 requires the Permittee to effectively prohibit non-storm water discharges into the MS4 through enforcement of an ordinance or other regulatory mechanism to the extent allowable under Idaho state law. Part 3.5.2 identifies the minimum prohibitions that EPA expects each Permittee to be able to enforce within its jurisdiction, if necessary. EPA has reviewed the local ordinances and regulatory mechanisms currently imposed by existing MS4 Permittees, and EPA generally believes the existing ordinances/mechanisms can fully authorize the specific prohibitions in Part 3.5.2. EPA clarifies that it is unnecessary for a local ordinance/mechanism to cite the individual prohibitions listed in Permit Part 3.5.2, provided that the Permittee's existing regulatory mechanism would address such discharges, were

they to be found discharging into the MS4. This provision provides a minimum expectation for the local ordinance/regulatory mechanism to fully prohibit the breadth of possible non-storm water discharges that could negatively impact water quality.

As previously noted, EPA recognizes that some MS4 operators in Idaho -such as highway districts- may not have the legal authority to enact enforceable local ordinances; in such case, the operator may evaluate and cite to any of its existing policies, standard operating procedures, or other means in ensuring that any non-storm water discharges will be eliminated when needed.

Permit Part 3.5.3 describes EPA's expectations for a Permittee's Complaint Reporting and Response Program. The Permittee must maintain, and advertise, a publicly accessible and available means for the public to report illicit discharges; such reports must be answered within two days, and records regarding actions taken must be maintained.

Part 3.5.4 requires Permittees to conduct dry weather outfall screening to identify non-storm water flows. EPA has added prescriptive expectations for prioritized screening of 50% of the outfalls throughout the jurisdiction, for using appropriate screening and monitoring protocols when flows are identified during dry weather, and for recordkeeping/documentation. Data collected through the reporting of illicit discharges and connections, as well as through regular dry weather outfall screening, can reveal important trends in the types of pollutants generated and transported into the MS4. EPA has included a requirement that the Permittees locate and map the occurrences of illicit discharges. EPA recommends that samples taken during dry weather screening should be sampled for pH, total chlorine, detergents, total copper, total phenols, fecal coliform bacteria, and turbidity.

Appropriate threshold limits for dry weather monitoring results are important to helping distinguish pollutant spikes from normal background conditions at a particular outfall. For example, through its Storm Water Investigation Manual, the Ada County Highway District established threshold levels which, when exceeded, result in retesting to determine whether the sample was an isolated event or an ongoing water quality issue. The Permittees should also consider establishing a visual baseline for each outfall type, to establish what constitutes "normal" dry weather flows, and to distinguish between background conditions (uncontaminated ground water infiltration, for example) versus abnormal, non-storm water flows that are prohibited by the permit.

Permit Part 3.5.5 requires mandatory follow-up actions for recurring illicit discharges (identified by complaints or though Permittee screening activities); such response activities

must begin within 15 days of identifying elevated concentrations of screening parameters, and action must be taken to eliminate problem discharges within 45 days.

Permit Part 3.5.6 requires Permittees to respond to spills and maintain all appropriate spill prevention and response capabilities, as appropriate to their jurisdiction and overall responsibilities, through coordination with appropriate entities to provide maximum water quality protection at all times.

Permit Part 3.5.7 requires coordination with appropriate agencies to ensure the proper disposal of used oil and toxic materials by employees and the public. Permittees should encourage recycling and proper disposal of used oil and household hazardous waste through community outreach and public education.

Permit Part 3.5.8 requires the Permittee to train appropriate municipal and state staff to respond to spills, complaints, and illicit discharges/connections to the MS4. Municipal staff can be the "eyes and ears" of the storm water program if they are trained to identify illicit discharges and spills or evidence of illegal dumping.

7. Education, Outreach and Public Involvement (MS4GP Part 3.6)

Permit Part 3.6 addresses the education, outreach, and public involvement requirements consistent with the (combined) relevant regulatory requirements of §§122.34(b)(1) and (b)(2).

The purpose of this SWMP control measure is to reduce or eliminate behaviors and practices that cause storm water impacts on receiving waters, by motivating audience understanding of actions they can take to prevent pollutants in storm water runoff entering the MS4 and local waters. This control measure also provides opportunities for public participation in the review and implementation of the SWMP. Education and opportunities for public involvement are important elements of successful water quality protection programs at the local level. At a minimum, these requirements include the distribution of educational materials to the community (or equivalent outreach activities) about the impacts of storm water discharges on water bodies, and require Permittees to comply with applicable state, tribal, and local public notice requirements when engaging their local stakeholders.

Previously issued small MS4 permits in Idaho contain these basic requirements, and all of the existing small MS4 Permittees continue to conduct a wide range of successful and creative public education /public involvement efforts related to storm water management. These programs appear to successfully reach their intended target audiences.

Within different areas, individual permittees with public education resources and expertise have taken the lead on the SWMP public education and outreach, often through shared

working arrangements on behalf of their fellow MS4 permittees. EPA strongly encourages such cooperative outreach efforts to continue, and hopes that the MS4GP might inspire additional cross-area and/or interstate outreach and education efforts among the Permittees.

The MS4GP contains the following Education, Outreach and Public Involvement program components:

Permit Part 3.6.1 establishes a compliance deadline of one year from the permit effective date for MS4 operators to begin, or update and continue, their existing public education, outreach, and public involvement program, and/or to impose new program components, within the Permit Area. EPA believes this timeframe is justified to allow MS4 Permittees to adjust the existing programs as necessary within the Permit Area.

Permit Part 3.6.2 specifies overall requirements for the Education, Outreach and Public Involvement Program. To the extent allowable pursuant to the respective authority granted the individual Permittee under Idaho law, the Permittee must work to educate and engage interested stakeholders in the development and implementation of the SWMP control measures.

Permit Part 3.6.3 requires the Permittee to distribute and/or offer a minimum of eight educational messages to at least one of the four audiences listed in Part 3.6.4, during the term of the Permit.

Permit Part 3.6.4 identifies the target audiences (i.e., General Public; Business/Industrial/Commercial/Institutions; Construction/Development Professionals; and Elected Officials, Land Use Policy and Planning Staff). For each audience, the permit includes a non-exclusive list of suggested educational topics for the Permittee to consider as its focus during the Permit term.

Permit Part 3.6.5 requires the Permittee to assess, or to participate in an effort to assess, the understanding and adoption of behaviors by the target audience(s). Although assessment of ongoing activities and initiatives can often be complicated, evaluating programs allows organizers to better understand those program components are most effective and to respond to evaluative information with program changes that may improve the effectiveness of the programs by providing better education. Recent developments in mobile technology now allows local agencies to gather real time data for a wide range of issues. Applications like *SeeClickFix* and *Litterati* are providing comprehensive feedback and dynamic citizen engagement in a variety of communities.[57] EPA encourages Permittees to

[57] Jull, 2004. See also: https://gov.seeclickfix.com/ and http://litterati.org/

consider creative techniques to provide meaningful feedback on the outcome of their individual and combined education outreach activities.

Permit Part 3.6.6 requires the Permittee to maintain records of their education, outreach, and public involvement activities.

Permit Part 3.6.7 allows such education efforts to be conducted in conjunction with Education and Training for other specific SWMP Control Measures.

Permit Part 3.6.8 requires the Permittee to maintain and promote at least one publicly-accessible website to provide access to relevant SWMP information, including the Permittee's SWMP plan, appropriate contact information and educational materials.

F. Discussion of the MS4GP's Special Conditions for MS4 Discharges to Impaired Waters

Special Conditions in MS4GP Part 4 refer to additional water quality based requirements for specific MS4 discharges into impaired waters. These requirements for identified MS4 Permittees are organized by UA and receiving water body in MS4GP Appendix F1 through F6.

As previously mentioned in Sections II.D and III.B of this Fact Sheet, additional terms and conditions are necessary as water quality-based effluent limitations for certain regulated small MS4 discharges, as required by 40 CFR 122.34(c).

Permit Part 4.1 defines the phrase, *Affected Permittee,* to mean: 1) any MS4 Permittee that must uniquely comply with specific requirements based on discharges into a water with an applicable TMDL, as specified in MS4GP Appendix F; and 2) any MS4 Permittee required to comply with additional requirements to reduce or eliminate pollutants of concern in the MS4 discharges to an impaired water as described therein.

An *Applicable TMDL* is any TMDL analysis that EPA has approved on or before the issuance date of the GP. An *impaired water* means any water body that does not meet applicable water quality standards for one or more beneficial uses by one or more pollutants, and that IDEQ includes in its 2012 Integrated Report, Appendix J, as a "Category 5" Water of the state where a TMDL is necessary. The phrase *pollutant of concern* means the parameter for which the waterbody does not meet the Idaho water quality standard.

Permit Part 4.2 outlines the general requirements for Affected Permittees, and requires the Permittee's compliance with the applicable requirements for the specific receiving waterbody. Affected Permittee(s) must include a description of the TMDL or impaired water-related requirements in their SWMP document, and report on their interim compliance with the applicable requirements in each Annual Report. Categories of additional water quality based requirements identified for Affected Permittees include: *Wet Weather/Stormwater Discharge Monitoring*; *Additional Dry Weather Outfall Screening*; and *Industrial/Commercial Storm Water Discharge Assessment and Management*.

Appendices 6 and 7 of this Fact Sheet describe, in detail, EPA's rationale for the specific additional water quality based requirements to address MS4 discharges into impaired waters. EPA reviewed and considered each relevant TMDL analysis report and implementation plan (if available), to define appropriate and necessary storm water management actions for Affected Permittees to better control pollutants of concern in the MS4 discharges to impaired waters.

- Where EPA determines that a Permittee's implementation of the SWMP control measures in MS4GP Part 3 is adequate to reduce the pollutant of concern and/or consistent with the assumptions of a relevant TMDL, EPA clarifies here that the Affected Permittee and TMDL is not referenced in MS4GP Appendix F because compliance with Part 3 of the MS4GP constitutes compliance with the TMDL. For example, where implementation of a public education program or ongoing maintenance of the MS4 is sufficient to deal with pollutants into the impaired receiving water, EPA does not reiterate this fact in the GP.

- Where an Affected Permittee must add to, or refine, a storm water control measure to include a specific location or activity (such as, focusing their illicit discharge screening program in the drainage area discharging into the impaired water, or investigating businesses within their jurisdiction identified as likely sources of a pollutant of concern), EPA lists the additional locations or actions in MS4GP Appendix F with reference to the Permit Part 3 program component, and identifies the targeted area, activity, and/or implementation timeline.

- Where an Affected Permittee must conduct other actions, in addition to the control measures in Part 3, to address the contribution of pollutants of concern into an impaired water body that may or may not yet have an EPA-approved TMDL, EPA has included such additional terms and conditions in MS4GP Appendix F. For example, in some watersheds EPA requires monitoring for impairment parameters; in other areas, EPA requires Permittees to assess and consider controlling industrial or commercial sources of a unique pollutant of concern (such as PCBs or pesticides) within their jurisdiction.

G. Monitoring, Recordkeeping and Reporting Requirements

1. Basis

Section 308 of the CWA and federal regulation 40 CFR §122.44(i) require monitoring in permits to determine compliance with terms and conditions of a NPDES permit. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality. All MS4 Permittees must evaluate program compliance, keep records, and submit implementation progress reports, as specified in regulations for storm water at 40 CFR §122.34(d).

Although the Phase II MS4 permit regulations do not explicitly require MS4 permittees to conduct analytical monitoring, EPA acknowledges that data collected by monitoring is generally useful, and can be used to substantiate iterative water quality improvement and compliance

with permit conditions and/or water quality standards. For Phase II MS4s, EPA has stated that it expects such monitoring only in identified locations for relatively few pollutants of concern.[58] Further, EPA has provided guidance that, when using narrative BMPs to implement applicable WLAs and load reduction targets for municipal storm water, the NPDES permit must include some type of monitoring activity to assure compliance with the WLA/target.[59]

Monitoring requirements in prior small MS4 permits in Idaho has included (1) storm water discharge monitoring to characterize storm water quality; (2) dry weather outfall screening and monitoring as part of the illicit discharge detection and elimination programs; and (3) in the Portneuf River watershed, ambient water quality monitoring to characterize water quality conditions.

MS4GP Part 5 outlines the continued requirements for recordkeeping and reporting relevant to all regulated small MS4 Permittees. Subsequent sections outline specific provisions related to watershed specific storm water discharge monitoring, including requirements for sampling PCBs, and corresponding quality assurance requirements for all monitoring and data collection activities.

2. Reporting and Recordkeeping Requirements (MS4GP Parts 5.1 through 5.4)

MS4GP Part 5.1 requires each Permittee to assess their compliance with the requirements of the MS4GP on an annual basis, and to document such evaluation through the submittal of an Annual Report.

MS4GP Part 5.2 requires the Permittee to keep all records required by the MS4GP for a period of at least five years, and submit such records only when requested by EPA. The Permittee's SWMP materials must also be available to the public; MS4 operators may charge a reasonable fee for copies, and may require a member of the public to provide advance notice of their request. As previously described, MS4GP Part 3.6 also requires the Permittee to provide their SWMP materials to the public electronically via a dedicated website.

MS4GP Part 5.3 describes both the schedule and expected content for annual progress and data reports. At a minimum, Permittees must submit their reports to both EPA and IDEQ, unless EPA provides an alternative means of reporting.

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[58] See EPA 1999, page 68769.
[59] See EPA 2014a.

Annual Reports must contain an evaluation of the Permittee's compliance with the terms and conditions of the permit, and documentation of the Permittee's progress towards achieving the implementation goals of the Permit. The Annual Report must also relevant data and discharge monitoring reports. For the MS4GP a standardized Annual Report format in MS4GP Appendix E will streamline the Permittee's reporting. In anticipation of national electronic NPDES reporting requirements for MS4 permittees, the MS4GP will continue to require annual reports, however the scope and format will be greatly simplified to improve efficiency.

Permit Part 5.4 provides the appropriate addresses for the submittal of all reports required by the GP, and includes new provisions to allow the Permittee the option to submit Annual Reports and other materials or data electronically at a future date. In the NPDES Electronic Reporting Rule (published at 80 FR 64064, October 22, 2015). EPA is working towards having all reports submitted in compliance with an NPDES permit to be submitted electronically no later than December 21, 2020. Although EPA must first revise the Electronic Reporting Rule as it relates to the MS4 permit program, once an electronic reporting mechanism is available for use, the MS4 Permittee will no longer be required to submit paper copies of reports or documents to the EPA and/or IDEQ. EPA will work closely with all MS4 Permittees once the opportunity for electronic reporting is available.

3. Stormwater Discharge Monitoring

Beginning in 2006, EPA required most of the Phase II small MS4 operators discharging to impaired waters to conduct grab samples of MS4 discharges at selected outfalls to fulfill three monitoring objectives, namely: 1) to estimate the pollutant loading (or pollutant loading reductions) discharged from the MS4s; 2) to assess the effectiveness and adequacy of control measures implemented through the applicable MS4 permit; and 3) to identify and prioritize those portions of the MS4 requiring additional controls. When issuing these prior MS4 permits, EPA required different monitoring parameters for some, but not all, of the regulated small MS4s, based on discussions with permittees and IDEQ about the receiving water impairment and relevant TMDL status in the particular UA. Based on an area's rainfall patterns, EPA specified the required number of grab samples per year (which varied between 1-6 samples.)

Through the collection of discharge monitoring data, EPA attempted to rectify the fundamental absence of data representing MS4 discharge quality to support IDEQ's TMDL development or TMDL refinement and address ongoing water quality impairments.

Table 4 below summarizes the variety of monitoring parameters and collection methods that EPA has previously required in or allowed as part of these Phase II MS4 permits in Idaho. For individual watersheds, the specific Phase II MS4 dataset continues to grow as more data points are collected, and for that UA. Existing MS4 Permittees responsible for discharge monitoring

have each provided feedback to EPA regarding the relative value- from their perspective- of past data collection efforts.

During the development of the MS4GP, EPA has considered different options for how MS4 Permittees might measure and assess compliance with the MS4GP requirements in the future Given the inherent difficulty and overall expense associated with MS4 discharge monitoring, , such as:

- Require existing MS4 Permittees to continue storm water discharge monitoring in the same manner as is currently conducted and directed by the prior Phase II MS4 permits.
    - Under this option, EPA would incorporate into the MS4GP text the specific citations to the existing storm water discharge monitoring plans as currently conducted in each UA.
- Allow new MS4 Permittees, and existing MS4 Permittees at their option, to propose their own unique methods of collecting relevant data to support the assessment of their storm water management activities.
    - This option would require Permittees within the watershed to establish specific metrics to measure storm water quality improvements over time. This option provides maximum flexibility for the MS4 Permittee, and IDEQ, to establish appropriate assessment methods necessary for the individual receiving waterbody.
- Eliminate MS4 outfall sampling requirements for regulated small MS4s discharging into impaired waters, and require quantitative programmatic assessments of SWMP implementation to be conducted by the Permittee or group of permittees. This option increases the focus on the effectiveness of the Permittee's on-the-ground control measure implementation, yet provides little direct information about receiving water quality or the relative pollutant contribution from MS4 outfalls in each UA.

EPA supports the continued collection of storm water discharge monitoring data in each MS4 Permit Coverage Area to provide information on which to judge the relative success of SWMP control measures, and whether MS4 discharges cause or contribute to violations of Idaho WQS. The value of this information outweighs any advantage gained from discontinuing the existing data collection efforts currently conducted by the existing small MS4 Permittees.

To continue building upon the limited MS4 characterization dataset statewide, and provide (albeit) limited analytical information to inform TMDL implementation activities, the MS4GP requires existing small MS4 Permittees discharging to impaired waters in the Coeur d'Alene, Nampa/Caldwell, and Boise UAs to continue wet weather monitoring of all pollutants of concern for the respective receiving waters at existing MS4 outfall locations.

EPA requires that all Affected Permittees named in MS4GP Appendix F (i.e. those discharging to impaired waterbodies) be required to monitor, at a minimum, for the impairment pollutants identified for that specific watershed. After the permit effective date, revised monitoring plans must be submitted for EPA review and approval as required by MS4GP Part 1.4 and 2.9. Upon EPA acceptance of the monitoring plans, EPA will modify the MS4GP- if necessary- to incorporate any specific provisions and reference the approved monitoring program.

Table 4: ***Parameters Used to Characterize Stormwater Discharge Quality in Prior Idaho Phase II MS4 Permits***

Parameter	***Grab Sampling, by Phase II MS4 Permittee(s) in Receiving Waters Indicated***
Ammonia	Yes – in Portneuf River, Pocatello Creek
E. coli	Yes-in Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Flow/Discharge, Volume, in cubic feet	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek, Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Hardness (as CaCO3)	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Lead – Total	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Nitrate + Nitrite	Yes- in Portneuf River, Pocatello Creek
Nitrogen, Total	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek, Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Oil and Grease	Yes- in Portneuf River, Pocatello Creek
Phosphorus - Total	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek, Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain
Polychlorinated Biphenyls (PCBs)	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Temperature	Yes- in Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek
Total Suspended Solids (TSS)	Yes – in Lake Coeur d'Alene; Spokane River; French Gulch; Fernan Creek; Portneuf River; Pocatello Creek; Lower Boise River; Indian Creek; Mason Creek; Wilson Drain; Willow Drain
Zinc- Total	Yes – in Lake Coeur d'Alene; Spokane River; French Gulch; Fernan Creek

EPA proposes that Affected Permittees continue, and/or begin, to monitor storm water discharges from the existing or selected MS4 outfall monitoring locations, and EPA encourages

permittees to work together in a collaborative, watershed-based fashion to accomplish such sampling during the permit term.

EPA amends the objective of the storm water discharge monitoring from prior individual MS4 permits, and intends for the required monitoring to characterize MS4 discharges occurring at a given location from at least two individual storm events during each calendar year. The overall objective of such monitoring is to assess the quality of the affected Permittee's MS4 discharges relative to the Idaho water quality standards and associated TMDL or watershed goals.

Part 5.5.8 of the MS4GP requires Permittees to revise existing Quality Assurance Project Plans to meet monitoring requirements. Ideally, EPA envisions the possible development of a statewide template QAPP for the desired MS4 data collection effort in order to guide the consistent collection of wet weather discharges. EPA encourages regulated small MS4s to conduct such monitoring through a cooperative consortium of all MS4 entities within a specific watershed or UA.

4. Surface Water Monitoring

Affected Permittees in the Pocatello UA discharging to the Portneuf River must continue to conduct receiving water monitoring at the established locations upstream and downstream of the Pocatello UA, as previously required in their individual MS4 permit. To comply with expectations of the Portneuf River TMDL and provide relevant information on whether the selected types of specific BMPs are working, instream monitoring should focus solely on turbidity. [60]

5. Dry Weather Discharge Screening

Monitoring MS4 flows during dry weather is a necessary component of the IDDE program outlined in Permit Part 3.5. EPA proposes enhanced dry weather discharge characterization for affected MS4 permittees in compliance with certain TMDLs. See Section II.F. and Appendix 3.XX of this document for additional discussion of these requirements.

6. Summary of Monitoring Requirements (MS4GP Part 5.5)

The MS4GP requires monitoring only by Affected Permittees discharging into impaired waters.

Part 5.5.1 outlines the objectives of the MS4 monitoring plans. In order to reference the nature of monitoring being conducted in each area, EPA will review all submitted monitoring plans and

[60] See: City of Pocatello, 2016.

incorporate reference to the specific monitoring activities in the MS4GP. Such updated plans must be submitted 180 days after the permit effective date.

Part 5.5.2 describes a proposed option for two or more MS4 permittees to share responsibility for accomplishing required monitoring necessary to comply with applicable requirements in Part 4 or Appendix F.

Part 5.5.3 cites the federal NPDES requirement that all samples must be representative of the volume and nature of the monitored discharge.

Part 5.5.4 specifies that any additional monitoring data collected, beyond that which is required by the MS4GP, must be submitted to EPA as required by federal regulations at 40 CFR Part122.

Part 5.5.5 requires Affected Permittees to conduct wet weather storm water discharge monitoring, if included in the relevant section(s) of Permit Part 4, Appendix F.

Part 5.5.6 summarizes requirements for Affected Permittees to conduct surface water quality sampling. At this time, only the Portneuf River TMDL uses instream data to assess

Part 5.5.7 outlines the requirements for monitoring of PCBs in storm water discharge and in sediment collected from catch basins using EPA Methods 1668C and 8082,
Part 5.2.8 describes the requirements for Quality Assurance Project Plans associated with any monitoring. If applicable, the MS4 Permittee is required to update (or for new Permittees, create) their Quality Assurance Plan within 180 days of the effective date of the final permit. The Quality Assurance Plan must include of standard operating procedures the Permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting. Permittees must complete a new or revised QAPP, and must be acknowledge its completion as part of the 1st Year Annual Report. Permittees must provide a copy of the QAPP to the EPA and the IDEQ upon request

Part 5.5.9

Part 5.5.9 clarifies EPA's expectations regarding use of appropriate analytical methods when conducting monitoring in compliance with the MS4GP.

H. Standard Permit Conditions

1. Standard Permit Provisions

Parts 6 and 7 of the MS4GP contain standard regulatory language that must be included in all NPDES permits. The standard regulatory language covers requirements such as monitoring, recording, and reporting requirements, compliance responsibilities, and other general requirements.

2. Duty to Reapply and Continuation of the Expired General Permit

In accordance with 40 CFR §122.46(a), NPDES permits shall be effective for a fixed term not to exceed five (5) years. Therefore, the MS4GP will expire five years from the effective date of the final permit. Part 7.2 of the MS4GP requires any MS4 that intends to continue its operational control and management of MS4 discharges to submit a NOI of coverage under a new GP, or an individual permit application.

MS4GP Part 7.2.1 of the MS4GP describes the procedure that applies if EPA does not reissue the MS4GP prior to its expiration date. If the MS4GP is not reissued or replaced prior to its expiration date, existing MS4 discharges will be authorized under an administrative continuance, in accordance with the Administrative Procedure Act and 40 CFR §122.6, and the conditions of the MS4GP remain in force and in effect for discharges authorized prior to permit expiration. A Permittee will be covered by the MS4GP following the submittal of a complete NOI at least 180 days prior to the expiration date of the MS4GP, until EPA provides subsequent authorization under a reissued or replacement Permit. Alternatively, EPA may issue or deny an individual permit for the Permittee's discharge; or EPA may formally decide not to reissue the MS4GP, at which time the Permittee must seek authorization under an alternative general permit or an individual permit.

IV. Other EPA Determinations Related to MS4 Discharges in Idaho

A. Waivers for Small MS4s in Urbanized Areas

NPDES regulations at 40 CFR §122.32(d) and (e) provide a mechanism for granting waivers from MS4 permit requirements to those entities automatically designated as regulated small MS4s by virtue of their location within a UA.

A waiver may be available for small MS4s serving a population of less than 1,000 people within a UA, where the MS4 is not contributing substantially to the pollutant loadings of a physically interconnected regulated small MS4. In addition, if the MS4 discharge includes any pollutant that has been identified as a cause of impairment of any receiving water body, the NPDES permitting authority must determine that storm water controls are not needed based

on waste load allocations that are part of an EPA-approved or established TMDL that addresses the pollutant of concern. See also 40 CFR §123.35(d)(1).

A waiver may be available for small MS4s serving a population of under 10,000 people within a UA, when storm water controls are not needed based on WLAs that are part of an EPA-approved or established TMDL that address the pollutants of concern. In such cases, the NPDES permitting authority must evaluate all waters of the U.S that receive a discharge from the otherwise regulated small MS4, and must determine that such controls are not needed. Alternatively, if a TMDL has not been developed or approved, the NPDES permitting authority must conduct an equivalent analysis that determines sources and allocations for the pollutant(s) of concern. In this situation, a "pollutant(s) of concern" includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation), pathogens, oil and grease, and any pollutant identified as a cause of impairment of any water body that receives a discharge from the MS4. Further, the NPDES permitting authority must have determined that future discharges from the MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts. See also 40 CFR §123.35(d)(2).

At a minimum, any waivers granted by the NPDES permitting authority under 40 CFR §123.35(d)(2) must be reevaluated at least every five years to determine if the information required for granting the waiver has changed, and/or in light of any new evidence provided as part of a petition.

EPA previously accepted MS4 permit waiver requests, pursuant to 40 CFR 122.32(d), from the City of Hayden Lake, Fernan Lake Village, and the Idaho National Laboratory. In 2012, EPA also received a MS4 permit waiver request from the Notus-Parma Highway District. EPA has evaluated these waiver requests, and has no further information that would change the determination that it is appropriate to continue to waive these entities from the MS4 permitting requirements. Materials supporting EPA's decisions are available for review and comment, upon request, as part of the Administrative Record for the MS4GP.

B. EPA Consideration of Petitions under 40 CFR §122.26(f)

MS4 discharges may be required to obtain NPDES permit coverage as a result of a petition submitted to EPA as outlined in 40 CFR §122.26(f). In addition, any MS4 operator may petition EPA to require a NPDES permit for any discharge into an MS4. Any person may petition EPA to require a permit for a discharge composed entirely of storm water which contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. To date, EPA has not received any formal petitions to designate additional MS4

discharges for permitting. In the event that EPA receives a petition to designate a MS4 discharge in the future, EPA proposes to use the Agency-recommended evaluation criteria, available by request from EPA Region 10, to make any final determination within the timeframes required by the federal regulation.

C. EPA Designation to Regulate Other MS4 Discharges

EPA has authority under the CWA to designate additional storm water discharges, beyond those defined in the NPDES regulations, as needing to obtain a permit when necessary to protect water quality or remedy localized water quality impacts. See 40 CFR §§122.26(a)(1)(v) and (a)(9). EPA is required to consider designation when a candidate MS4 discharge is located outside of an Urbanized Area and the MS4 serves a jurisdiction with a population density of 1,000 people per square mile and a population of at least 10,000 people. EPA must also consider whether to designate a candidate MS4 as needing NPDES permit coverage when discharges from the MS4 contribute substantially to the pollutant loadings of a physically interconnected regulated small MS4. See 40 CFR §123.35(b)(3) and (4).

EPA developed criteria to use when evaluating other MS4s for designation. EPA's evaluation criteria are similar to the designation guidance recently developed by IDEQ.[61] When EPA decides to designate a MS4's discharges as needing NPDES permit coverage, EPA will provide public notice and an opportunity for the public to comment on the designation decision. Once designated, the MS4 would be eligible to apply for coverage under the MS4GP. Alternatively, EPA could instead require the candidate MS4 operator to submit an application for an individual NPDES permit.

EPA proposes to designate discharges from the MS4s owned and/or operated by the following entities as needing NPDES permit coverage; EPA's rationale supporting these designation decisions is available for public review as part of the Administrative Record for this MS4GP permit action {***add external web link to appropriate designation document***}**:**

1. City of Moscow, Idaho
2. University of Idaho in Moscow, Idaho

Appendix 7.F and Appendix 7.G of this document discusses the water quality issues in the South Fork Palouse River watershed near the Idaho/Washington state border, where the City of Moscow and University of Idaho are located. EPA notified the City of Moscow in 2008 of its intention to designate the City's MS4 discharges as needing NPDES permit coverage, and in August 2009, City of Moscow responded by submitting a small MS4 permit application for

[61] See: IDEQ 2016; EPA 2016e; EPA 2016f.

discharges occurring in its jurisdiction. EPA is accepting public comment on its decision to authorize the City of Moscow's MS4 discharges under the MS4GP.

Based on the South Fork Palouse River's water quality impairment as identified by the Washington Department of Ecology downstream of these entities, and based on the physical interconnection between the two MS4s, EPA also proposes to designate the University of Idaho's MS4 discharges as regulated under the NPDES program. Upon issuance of the final permit, the University of Idaho in Moscow must submit a NOI for coverage under the MS4GP as outlined in MS4GP Part 1.4. At any time prior to the final issuance of the MS4GP, the University of Idaho may submit a NOI or MS4 permit application.

Pursuant to 40 CFR §123.35(b)(3), EPA has also evaluated other MS4 discharges in Idaho communities located outside of Census defined UAs and whose population statistics exceed the thresholds identified above. Specifically, EPA evaluated the Idaho communities of Hailey; Mountain Home; Rexburg; Blackfoot; Sandpoint; Twin Falls; Jerome; and Burley. Using the previously identified criteria, and with the information available at this time, EPA is not choosing to designate any additional MS4 discharges in Idaho for NPDES permitting.

V. Other Legal Requirements

A. Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high, and adverse human health or environmental effects of its programs, policies, and activities." The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. "Overburdened" communities can include minority, low-income, tribal, and indigenous populations, or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 10 will prioritize enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit http://www.epa.gov/compliance/ej/plan-ej/ .

As part of the permit development process, EPA Region 10 conducted a screening analysis to determine whether this permit action could affect overburdened communities. EPA uses a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify permits for which enhanced outreach may be warranted.

Based on this screening, the Nampa/Caldwell, Moscow, and Pocatello/Chubbuck have been selected as areas where potentially overburdened communities reside. In order to ensure that individuals in these MS4 areas are able to participate meaningfully in the permit process, EPA is conducting the enhanced outreach activities to ensure that interested stakeholders in these areas, and throughout the state, will be informed and able to provide their input on appropriate storm water management activities.

Regardless of whether a regulated small MS4 discharge is located near a potentially overburdened community, the EPA encourages all Permittees to review (and to consider adopting, where appropriate) Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities (see https://www.federalregister.gov/articles/2013/05/09/2013-10945/epa-activities-to-promote-environmental-justice-in-the-permit-application-process#p-104).

B. Endangered Species Act

The Endangered Species Act requires federal agencies to consult with the National

Oceanic and Atmospheric Administration – National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) regarding potential effects an action may have on listed endangered species.

EPA is currently evaluating the potential effects of the proposed MS4GP, through development of a Biological Evaluation (BE). The BE will determine whether issuance of the MS4GP is likely to adversely affect any threatened or endangered species. EPA will complete its preliminary evaluation (***In The Near Future concurrent with Proposing The Permit For Public Comment***) and has begun preliminary informal consultation discussions with NOAA-Fisheries and USFWS, as required by the Endangered Species Act.

C. Essential Fish Habitat

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish spawning, breeding, feeding, or growing to maturity. The Magnuson-Stevens Fishery Conservation and Management Act requires EPA to consult with the NOAA-Fisheries if a proposed action has the potential to adversely affect (by reducing the quality and/or quantity of) EFH. EPA is currently evaluating the impacts of EPA's issuance of this permit and will complete EFH consultation if necessary in the near future.

The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. The EPA has prepared an EFH assessment which appears in **(insert reference to appropriate portion of the BE document/appendix)**.

Based on the urban location of the MS4 discharges to be authorized under the MS4GP, EPA has determined that the issuance of the GP does not affect any EFH species in the vicinity of the discharges, therefore consultation is not required for this action.

EPA determined that issuance of the MS4GP is not likely to adversely affect EFH near the MS4 Permit Area. **EPA provided NOAA Fisheries with copies of the draft permit and fact sheet during the public notice period**, and will consider any comments received from NOAA Fisheries regarding EFH prior to the issuance of the MS4GP.

D. National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of federal undertakings on historic properties listed on, or eligible for listing on, the National Register of Historic Places. The term federal "undertaking" in NHPA regulations to include a project, activity, or program of a federal agency that can result on

changes in the character or use of historic properties, if any historic properties are located in the area of potential effects for that project, activity or program. See 36 CFR §802(o). Historic Properties include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. See 36 CFR §802(e).

Federal undertakings include the EPA's issuance of a general NPDES permit. To ensure compliance with the NHPA, the MS4GP authorizes storm water discharges only under the following circumstances:

1. The MS4 storm water discharges, and discharge-related activities by the Permittee, do not affect a property listed or that has been reviewed and determined eligible for listing on the National Register of Historic Places; or
2. The MS4 operator complies with a written agreement with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) that outlines all measures that will be undertaken to mitigate or prevent adverse effects to historic properties.

These requirements are implemented via the eligibility requirements of the MS4GP (see Permit Part 1.3.3 and Permit Appendix D); the MS4GP restricts eligibility for new MS4 applicants to include those MS4 discharges and MS4 discharge related activities that meet either of the above criteria. These criteria are based on the similar criteria used by the EPA Region 1 (Northeastern U.S.) and Region 6 (Southwestern U.S) in their respective MS4 general permits. Region 10 believes these conditions are appropriate for new MS4 applicants in Idaho. Appendix D of the MS4GP contains additional direction to new MS4 applicants submitting NOIs requesting coverage under the MS4GP after the permit effective date.

EPA previously addressed NHPA conditions when issuing the prior MS4 permits in Idaho. With regard to the existing MS4 Permittees and new MS4 Permittees listed in MS4GP Appendix A.1, the reduction of pollutants in runoff from these MS4s will not result in the disturbance of any site listed or eligible for listing in the National Historic Register. EPA believes that actions compliant with the MS4GP by existing MS4 Permittees and new MS4 Permittees listed in Permit Appendix A.1 will substantively comply with the terms and conditions of the National Historic Preservation Act. Therefore, EPA finds that the MS4 operators listed in Appendix A.1 are eligible for permit coverage under the MS4GP without further documentation. EPA reminds all Permittees that they must continue to comply with applicable state, Tribal and local laws concerning the protection of historic properties, and

must include documentation of permit eligibility in the Storm Water Management Program document.

EPA provided a copy of the MS4GP proposal package to the Idaho State Historic Preservation Office and will consider any comments received from NOAA Fisheries regarding EFH prior to the issuance of the MS4GP.

E. National Environmental Policy Act (NEPA) and Other Federal Requirements

Regulations at 40 CFR §122.49, list the federal laws that may apply to the issuance of permits i.e., ESA, National Historic Preservation Act, the Coastal Zone Act Reauthorization Amendments (CZARA), NEPA, and Executive Orders, among others. The NEPA compliance program requires analysis of information regarding potential impacts, development, and analysis of options to avoid or minimize impacts; and development and analysis of measures to mitigate adverse impacts.

Because regulated small MS4s are not subject to any EPA-promulgated effluent limitation guidelines (ELGs) or new source performance standards (NSPS) specific to their discharges, EPA has determined that no Environmental Assessments (EAs) or Environmental Impact Statements (EISs) are required under NEPA.

Idaho is not located in the U.S. coastal zone, so CZARA does not apply. In addition, the MS4GP will not authorize the construction of any water resources facility or the impoundment of any water body, or have any effect on historical property. No regulated small MS4s are located in areas with Wild and Scenic River designations. Therefore, EPA has determined that the Fish and Wildlife Coordination Act, 16 USC § 661 et seq., and the Wild and Scenic Rivers Act, 16 USC § 470 et seq., also do not apply to the issuance of the MS4GP.

F. State Certification

Section 401 of the CWA, 33 USC 1341, requires the EPA to seek a certification from the State that the conditions of the MS4GP are stringent enough to comply with Idaho WQS, including the state anti-degradation policy, before issuing the final permit. Federal regulations at 40 CFR §124.53 allow for the state to stipulate more stringent conditions in the permit, if the certification sites the CWA or state law upon which that condition is based.

A certification must include statements of the extent to which each condition of the permit can be less stringent without violating the requirements of state law. In April 2016, EPA requested that the IDEQ review the Preliminary Draft MS4GP and provide a draft certification pursuant to 40 CFR §124.53. In October 2016, IDEQ notified EPA that it will

consider providing EPA with their CWA § 401 certification based on a proposed final MS4GP as developed by EPA after the public comment period. See Appendix 1 of this document. After EPA evaluates and addresses all public comments, EPA will send a proposed final MS4GP to the State for certification. If the State authorizes different or additional conditions as part of the certification, EPA may change the MS4GP to reflect these conditions.

G. Permit Expiration

The permit will expire five years from the effective date.

H. Presidential Oversight of Federal Regulations [Executive Order 12866]

The White House Office of Management and Budget (OMB) has exempted this action from the review requirements of Executive Order 12866 providing for presidential oversight of the regulatory process pursuant to Section 6 of that order. EPA has determined that this general permit is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

I. Economic Impact [Executive Order 12291]

EPA has reviewed the effect of Executive Order 12291 on the Draft MS4GP and has determined that it is not a major rule under that order.

J. Paperwork Reduction Act [44 USC § 3501 et seq.]

EPA has reviewed the requirements imposed on regulated small MS4 facilities in the Draft MS4GP under the. Under the provisions of the Paperwork Reduction Act, 44 USC 3501 et seq. OMB previously approved the information collection requirements in submissions the Agency made for the NPDES permit program, and assigned OMB control numbers 2040-0086 and 2040-0110.

VI. References

The following is a partial list of references supporting the development of the Idaho MS4GP; additional resource materialss are available in the Administrative Record for this action.

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EPA 2012. EPA Region 10's *Response to Comments on the NPDES Permit No. IDS-027561, December 11, 2012 – Final.* EPA Responses to Comments #18 and #22.

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EPA 2014a. EPA Office of Water memo "*Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs;*" November 26, 2014.

EPA 2014b. *Municipal Separate Storm Sewer System Permits- Post Construction Performance Standards and Water Quality Based Requirements- A Compendium of Permitting Practices*. EPA Office of Wastewater Management. June 2014. EPA 833-R-14-003.

EPA. 2015a. *Helpful Practices for Addressing Point Sources and Implementing TMDLs in NPDES Permits,* Prepared by EPA Region 9. June 2015.

EPA 2015b. *Small Residential Lot Stormwater Pollution Prevention Plan Template - 2012 EPA Construction General Permit*. December 2015. At https://www.epa.gov/npdes/stormwater-discharges-construction
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EPA 2016a. *NPDES Municipal Separate Storm Sewer System General Permit Remand, Proposed Rule* (81 FR 415, January 6, 2016.)

EPA 2016b. *NPDES Municipal Separate Storm Sewer System General Permit Remand, Final Rule* (81 FR 89320, Dec. 9, 2016.)

EPA 2016c. *Compendium of MS4 Permitting Approaches- Part 1: Six Minimum Control Measures.* EPA Office of Wastewater Management, November 2016. EPA-810-U-16-001.

EPA 2016d. *Compendium of MS4 Permitting Approaches- Part 2: Post Construction Standards.* EPA Office of Wastewater Management, November 2016. November 2016. EPA-810-R-16-017.

EPA 2016e. Region 10's *MS4 Designation and Petition Response Procedures* (Draft), July 2016.

EPA 2016f. EPA Region 10 Memorandum: *Evaluation of Certain Idaho MS4 Discharges for Possible Designation as Needing NPDES Permit Coverage*. (Draft), EPA Region 10. Revised Sept 2016.

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EPA *Fact Sheet for IDS027561 (Boise-Garden City Area MS4s),* pages 22-25

EPA Fact sheet for IDS028118 (City of Caldwell) pages 21-23.

Appendix 1: Correspondence from IDEQ Regarding CWA §401 Certification

Note: this appendix does not include the enclosure as referenced in this letter.

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
John H. Tippets, Director

OCT 1 3 2016

Mr. Michael Lidgard, Manager
USEPA, Region 10
NPDES Permits Unit
1200 Sixth Avenue
Seattle, WA 98101

RE: Response to EPA's request for a Preliminary Draft 401 Water Quality Certification for the Preliminary Draft General Permit for Regulated Municipal Separate Storm Sewer Systems (MS4GP) to Discharge Pollutants in the State of Idaho (IDR040000)

Dear Mr. Lidgard:

EPA has requested that DEQ provide a preliminary draft 401 water quality certification based upon the revised preliminary draft MS4GP and associated Fact Sheet. While DEQ appreciates EPA's efforts to streamline the process of MS4 permitting, DEQ feels that several elements in the proposed Permit warrant further discussions and possible revision. Therefore, DEQ has decided to not issue the preliminary draft 401 water quality certification of the MS4GP at this time.

Given the complexity of this Permit and the likelihood that EPA will revise it again in response to input received from DEQ and other entities, DEQ has decided to not issue a draft certification until we see the proposed final MS4GP. This means DEQ will be providing a public notice of our water quality certification decision separate from EPA's public notice of the MS4GP. As usual, DEQ will coordinate with EPA regarding the timing of the final 401 water quality certification.

This letter and enclosure describes DEQ's concerns with EPA's revised preliminary draft general permit for regulated MS4s that discharge pollutants in Idaho. Specifically, DEQ's biggest concern is how EPA expects the small Phase II MS4s to execute control measures that appear to be more prescriptive than the minimum control measures in federal regulations for the Phase II MS4s, e.g. lowered land disturbance threshold for triggering SWMP controls, expanding the geographic area, and increased/uniform monitoring requirements. In addition, the small MS4s need to be allowed the flexibility to pursue the solutions that work best for their situation, recognizing each is different and will require differing time and assistance to get those solutions in place. While DEQ has other concerns with the proposed permit, DEQ is hopeful that these will be addressed during future discussions with EPA or when EPA responds to the comments they received from other entities.

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DEQ's Comments on the Revised Preliminary Draft Municipal Separate Story Sewer Systems

DEQ's detailed comments are enclosed. If you have any questions or concerns, please do not hesitate to contact Nicole Deinarowicz at either (208) 373-0591 or via email at nicole.deinarowicz@deq.idaho.gov.

Sincerely,

Barry N. Burnell

Barry N. Burnell
Water Quality Division Administrator

ND:BNB:tg

Enclosure

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Appendix 2: Urbanized Area Maps

All U.S. Urbanized Area maps are available: http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/.

Maps of Urbanized Areas in the State of Idaho, as defined by the U.S. Bureau of Census		
Coeur d'Alene	Census 2000	http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua18451/ua18451_01.pdf
	Census 2010	http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua18451_coeur_dalene_id/
Lewiston	Census 2000	http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua49312/
	Census 2010	http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua49312_lewiston_id--wa/
Nampa	Census 2000	http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua60976/
	Census 2010	http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua60976_nampa_id/
Boise	Census 2000	http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua08785/
	Census 2010	http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua08785_boise_city_id/
Pocatello	Census 2000	http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua70426/ua70426_01.pdf
	Census 2010	http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua70426_pocatello_id/
Idaho Falls	Census 2000	http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua40996/ua40996_01.pdf
	Census 2010	http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua40996_idaho_falls_id/
Maps of Idaho Jurisdictions/Areas Designated by EPA as Needing MS4 Permit Coverage		
Moscow	Census Block – Census 2010	http://www2.census.gov/geo/maps/dc10map/GUBlock/st16_id/place/p1654550_moscow/

Appendix 3: Small Regulated Small MS4s Discharges to be Authorized under the MS4GP

Appendix lists entities EPA intends to cover under the MS4GP. Further information is available as part of the Administrative Record. Upon the permit effective date; EPA Region 10 will send each MS4 operator written authorization to discharge under the final MS4GP.
See Appendix 2 for links to maps of the UAs associated with Coeur d'Alene, Lewiston (ID)-Clarkston (WA), Nampa, Boise, Pocatello and Idaho Falls UAs.

Appendix 3 Small Regulated Small MS4s Discharges to be Authorized under the MS4GP						
Previous NPDES Permit #	**Operator Name**	**Census Defined Urbanized Area**	**Existing or New MS4 Permittee**	**Impaired Water/ TMDL?**	**Date of MS4 Application/ Renewal Application/ NOI Submittal**	**Receiving Waters**
Lower Boise River Watershed						
IDS-028185	Ada County Highway District	Boise UA	Existing MS4 Permittee	Yes	Yes-dated 1-15-2014	Boise River
IDS-028177	Idaho Transportation Department District #3	Boise UA and Nampa UA	Existing MS4	Yes	Yes-dated 10-9-2014	Boise River
IDS-028100	City of Middleton	Nampa UA	Boise River	Yes	Yes –dated 6-19-2014	Existing MS4
IDS-028126	City of Nampa	Nampa UA	Existing MS4	Yes	Yes- dated 7-7-2014	Willow Creek, Mill Slough, Indian Creek, Mason Creek, Lower Boise River
IDS-028142	Nampa Highway District #1	Nampa UA	Existing MS4 Permittee	Yes	Yes- dated 4-23-2014	North Robinson Lateral; 12th Avenue Drain, Duval Lateral; Elijah Drain, Moses Drain, Indian Creek, Mason Creek, Wilson Creek {*Confirm receiving waters}- 11 outfalls- find yrs 1 & 2)*
IDS-028118	City of Caldwell	Nampa UA	Existing MS4 Permittee	Yes	Yes- dated 6-30-2014	Indian Creek, Mason Creek, Boise River via tributaries

Appendix 3 Small Regulated Small MS4s Discharges to be Authorized under the MS4GP

Previous NPDES Permit #	Operator Name	Census Defined Urbanized Area	Existing or New MS4 Permittee	Impaired Water/ TMDL?	Date of MS4 Application/ Renewal Application/ NOI Submittal	Receiving Waters
IDS-028134	Canyon Highway Dist#4	Nampa UA	Existing MS4 Permittee	Yes	Yes- dated 6-18-2014	
Spokane River-Lake Coeur d'Alene						
IDS-028193	Post Falls Highway District+	Coeur d'Alene UA	Existing MS4 Permittee	Yes		Spokane River, Spring Creek 25 outfalls
IDS-028231	City of Post Falls	Coeur d'Alene UA	Existing MS4 Permittee	Yes	Yes- dated 6-4-2013	Spokane River
IDS-028207	Lakes Highway District+	Coeur d'Alene UA	Existing MS4 Permittee	Yes		Hayden Lake, Lake Coeur D'Alene, Spokane River
IDS-028215	City of Coeur d'Alene	Coeur d'Alene UA	Existing MS4 Permittee	Yes	Yes -5-13-2013	Spokane River, Lake Coeur d'Alene
IDS-028223	Idaho Transportation Department District #1	Coeur d'Alene UA	Existing MS4 Permittee	Yes	Yes -6-27-2013	Fernan Gulch
New Applicant +	Eastside Highway District+	Coeur d'Alene UA	New MS4 Permittee	Yes		Fernan Lake
Portneuf River						
IDS-028053	Bannock Co+	Pocatello UA	Existing MS4 Permittee	Yes		Portneuf River

Appendix 3 Small Regulated Small MS4s Discharges to be Authorized under the MS4GP

Previous NPDES Permit #	Operator Name	Census Defined Urbanized Area	Existing or New MS4 Permittee	Impaired Water/ TMDL?	Date of MS4 Application/ Renewal Application/ NOI Submittal	Receiving Waters
New Applicant	Idaho State University+	Pocatello UA	New MS4 Permittee	Yes		Portneuf River
IDS-028053	City of Pocatello+	Pocatello UA	Existing MS4 Permittee	Yes		Portneuf River; Pocatello Creek
IDS-028053	Idaho Transportation Department District #5+	Pocatello UA	Existing MS4 Permittee	Yes		Portneuf River
Snake-Clearwater						
IDS-028061	City of Lewiston+	Lewiston UA	New MS4 Permittee	Yes		Tammany Creek, Lindsay Creek, Lower Granite Dam Pool
New Applicant+	Lewis-Clark State College+	Lewiston UA	New MS4 Permittee	No		Lower Granite Dam Pool
IDS-028258	Idaho Transportation Department District #2	Lewiston UA	New MS4 Permittee	No		Lower Granite Dam Pool
	U.S. Army Corps of Engineers-Clarkston	Lewiston UA	New MS4 Permittee	No		Lower Granite Dam Pool
Snake River						
IDS-028070	City of Idaho Falls+	Idaho Falls UA	Existing MS4 Permittee	No		Snake River
IDS-028070	Idaho Transportation	Idaho Falls UA	Existing MS4 Permittee	No		

Appendix 3 Small Regulated Small MS4s Discharges to be Authorized under the MS4GP

Previous NPDES Permit #	Operator Name	Census Defined Urbanized Area	Existing or New MS4 Permittee	Impaired Water/ TMDL?	Date of MS4 Application/ Renewal Application/ NOI Submittal	Receiving Waters
	Department District #6+					
Palouse River						
New Applicant	City of Moscow	None	New MS4 Permittee	Yes		Paradise Creek, South Fork Palouse River
	University of Idaho (Moscow, Idaho)	None		Yes		Paradise Creek, South Fork Palouse River

Appendix 4: Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges

Appendix 4- Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges			
Urbanized Area or City	**Receiving Water**	**Citation from IDAPA or WAC**	**Designated Beneficial Uses**
PANHANDLE BASIN			
Coeur d'Alene Urbanized Area	Fernan Lake	58.01.02.110.10	Cold water aquatic life, salmonid spawning, primary contact recreation, domestic water supply
	Coeur d'Alene Lake	58.01.02.110.10	Cold water aquatic life, salmonid spawning, primary contact recreation, domestic water supply and special resource water
	Spokane River	58.01.02.110.12	Cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply.
	Spokane River (Washington Portion, immediately downstream of Idaho)	WAC 173-201A-130	*Spokane River* (*Washington portion, between River Mile 58.0 and RM 96.0*): "Class A" waterbody, site-specific temperature criterion of 20ºC. (See); designated uses: domestic, industrial and agricultural water supply; stock watering; migration, rearing, spawning and harvesting of salmonids and other fish; wildlife habitat; recreation including primary contact recreation, sport fishing, boating, and aesthetic enjoyment; and commerce and navigation. *Lake Spokane (reservoir formed by the Long Lake Dam on the Spokane River*): Class A and Lake Class water body; designated uses: domestic, industrial and agricultural water supply; stock watering; migration, rearing, spawning and harvesting of salmonids and other fish; wildlife habitat; recreation including primary contact recreation, sport fishing, boating, and aesthetic enjoyment; and commerce and navigation
	Hayden Lake	58.01.02.110.12	Cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply.
UPPER SNAKE BASIN			
Idaho Falls Urbanized Area	Snake River	58.01.02.150.03	Cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply
Pocatello Urbanized Area	Portneuf River	58.01.02.150.10	Cold water aquatic life, salmonid spawning, and , secondary contact recreation.

Appendix 4- Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges			
Urbanized Area or City	**Receiving Water**	**Citation from IDAPA or WAC**	**Designated Beneficial Uses**
	Pocatello Creek	58.01.02.150.10	Undesignated; presumed to be cold water aquatic life and primary contact recreation
SOUTHWEST BASIN			
Boise/ Nampa Urbanized Area	Boise River and its tributaries (*Five Mile, Ten Mile, Fifteen Mile Creeks, etc.*)	58.01.02.140.12	*Boise River, from the Diversion Dam to River Mile 50*: Cold water aquatic life, salmonid spawning, domestic water supply, and primary contact recreation and special resource water, *Boise River, from River Mile 50 to Indian Creek:* Cold water aquatic life, salmonid spawning and primary contact recreation *Boise River, Indian Creek to mouth*: Cold water aquatic life, salmonid spawning, and primary contact recreation
Nampa Urbanized Area	Indian Creek	58.01.02.140.12	Cold water aquatic life, and secondary contact recreation
	Mason Creek	58.01.02.140.12	Secondary contact recreation
	Willow Creek	58.01.02.140.12	Undesignated; presumed to be cold water aquatic life and primary contact recreation
CLEARWATER BASIN			
City of Moscow	Paradise Creek	58.01.02.120.01	Coldwater aquatic life salmonid spawning and secondary contact recreation
		WAC 173-201A-600	Salmonid spawning, rearing, & migration; primary contact recreation; domestic, industrial, & agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values
	South Fork Palouse River	58.01.02.120.01	Coldwater aquatic life salmonid spawning secondary contact recreation
		WAC 173-201A-600	Salmonid spawning, rearing, & migration; primary contact recreation; domestic, industrial, & agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values
Lewiston Urbanized Area	Lower Granite Dam Pool	58.01.02.120.08	Cold water aquatic life, primary contact recreation, domestic water supply
	Lindsay Creek	58.01.02.120.08	Cold water aquatic life and secondary contact recreation
	Tammany Creek	58.01.02.130.02	Cold water aquatic life and secondary contact recreation
	Snake River (Asotin River to Lower Granite Dam Pool)	58.01.02.130.02	Cold water aquatic life, primary contact recreation, domestic water supply

Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges

Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges			
Receiving Water	**Waterbody Assessment Unit**	**Impairment Pollutants**	**TMDL Status**
PANHANDLE BASIN			
Coeur d'Alene Lake	ID17010303PN001L_0L *Coeur d'Alene Lake*	Cadmium; Lead; Zinc	No TMDL completed.
Fernan Lake	ID17010303PN033 - *Fernan Lake*	Total Phosphorus	*Coeur d'Alene Lake & River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum*, October 2013. Approved November 2013.
Spokane River	ID17010305PN004_04 *Spokane R.-Coeur d'Alene Lake to Post Falls Dam* ID17010305PN003_04 *Spokane R.- Post Falls Dam to ID/WA border*	Cadmium; Lead; Total Phosphorus; Zinc	No TMDL completed.
Spokane River	*Spokane R.- Washington portion, downstream of the ID/WA border*	Polychlorinated Biphenyls (PCBs)	No TMDL completed.
Hayden Lake	ID17010305PN005L_0L *Hayden Lake*	Total Phosphorus	*Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305)*, November 2000. Approved January 2001.
UPPER SNAKE BASIN			
Snake River	ID17040201SK001_04 and 001_05 *Snake River Dry Bed Creek to River Mile 791*	Not Assessed.	Not applicable.
Portneuf River	ID17040208SK001_05 *Portneuf R.-Marsh Creek to American Falls Reservoir*	Total Nitrogen Oil and Grease Total Phosphorus *E. coli* Sedimentation /Siltation	*Portneuf River TMDL,* April 2001. *Portneuf River TMDL Revision and Addendum* February 2010. Approved July 2010.
Pocatello Creek	ID17040208SK025_02 *South Fork Pocatello Creek - source to mouth*	Sedimentation / Siltation	

Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges			
Receiving Water	**Waterbody Assessment Unit**	**Impairment Pollutants**	**TMDL Status**
SOUTHWEST BASIN			
Boise River and tributaries	ID17050114SW011a_06 *Boise R.-Diversion Dam to Veterans Memorial Pkwy* ID17050114SW005_06 *Boise R.-Veterans Memorial Pkwy to Star Bridge* ID17050114SW005_06a- *Boise R –Star to Middleton*	Temperature Fecal Coliform Sedimentation/ Siltation	*No TMDL completed for temperature.* *Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads,* September 1999, Approved January, 2000. *Lower Boise River Sediment and Bacteria TMDLs Addendum,* April 2008. Approved June, 2008. *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.
	ID17050114SW005_06b *Boise R.-Middleton to Indian Creek* ID17050114SW001_06 *Boise R. - Indian Creek to mouth*	Temperature Fecal Coliform Sedimentation/ Siltation Total Phosphorus	No TMDL completed for temperature *Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads,* September 1999, Approved January, 2000. *Lower Boise River Sediment and Bacteria TMDLs Addendum,* April 2008. Approved June, 2008. *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015 *Lower Boise River TMDL 2015 Total Phosphorus Addendum*. August 2015. Approved December 2015..
Indian Creek	ID17050114SW002_04 *Indian Creek - 4th order below Sugar Ave. in Nampa*	Temperature; Cause Unknown (Nutrients Suspected); *E.* coli; Sedimentation/ Siltation	No TMDL(s) completed for temperature or other causes. *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.
Indian Creek	ID17050114SW003a_04 *Indian Creek - New York Canal to Sugar Avenue*	Temperature; Cause Unknown; (Nutrients suspected)	No TMDL(s) completed for temperature or other causes
Mill Slough	ID17050114SW005_02 *Mill Slough and East Hartley Gulch*	Temperature	No TMDL(s) completed for temperature.

Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges			
Receiving Water	**Waterbody Assessment Unit**	**Impairment Pollutants**	**TMDL Status**
Mason Creek	ID17050114SW006_02 *Mason Creek - entire watershed*	Sedimentation/ Siltation; Temperature; Chlorpyrifos; Malathion; *E*. coli; Cause unknown (Nutrients suspected)	*Lower Boise River TMDL* *2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. No TMDL(s) completed for temperature, pesticides, or other causes.
Fifteen Mile Creek	ID17050114SW007_04- *Fifteenmile Creek - 4th order (Fivemile Creek to mouth*)	Sedimentation/ Siltation; Chlorpyrifos; *E.* coli	*Lower Boise River TMDL* *2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. No TMDL(s) completed for temperature, pesticides, or other causes.
Ten Mile Creek	ID17050114SW008_03- *Tenmile Creek - 3rd order below Blacks Creek Reservoir*	Sedimentation/Siltation Chlorpyrifos; *E*. coli Cause Unknown (Nutrients suspected)	*Lower Boise River TMDL* *2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. No TMDL(s) completed for pesticides, or other causes.
Five Mile Creek	ID17050114SW010_03- *Fivemile Creek - 3rd order tributaries*	Sedimentation/Siltation Chlorpyrifos *E.*coli Cause Unknown (Nutrients suspected)	*Lower Boise River TMDL* *2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. No TMDL(s) completed for pesticides, or other causes.
	ID17050114SW010_02- *Fivemile Creek, Eightmile and Ninemile Creeks - 1st & 2nd order*	*E.*coli	*Lower Boise River TMDL* *2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.
Willow Creek	ID17050114SW015_03 *Willow Creek - 3rd order*	Sedimentation/ Siltation	Lower Boise River TMDL 2015 Sediment and Bacteria Addendum. June 2015. Approved September 2015.
CLEARWATER BASIN			
Paradise Creek	ID17060108CL005_02 *Paradise Creek - Urban boundary to Idaho/Washington border*	Ammonia (Un-ionized) *E.* coli Fecal Coliform Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation Temperature	*Paradise Creek TMDL Water Body Assessment and Total Maximum Daily Load* *Paradise Creek Total Maximum Daily Load Implementation Plan* December 1999. Approved 2000. *Paradise Creek TMDL* *2015 Bacteria Addendum,* October 2015. Submitted to EPA.

Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges			
Receiving Water	**Waterbody Assessment Unit**	**Impairment Pollutants**	**TMDL Status**
Paradise Creek (WA portion)	Paradise Creek 10443 (WA-34-1025) Paradise Creek 10439 (WA-34-1025) Paradise Creek 10444 (WA-34-1025)	Fecal Coliform Bacteria	*South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060. October 2009. Approved 2009.
South Fork Palouse River	ID17060108CL002_03 *South Fork Palouse River-Gnat Cr. to Idaho/Washington border*	Nutrient/ Eutrophication; Biological Indicators; Sedimentation/ Siltation Temperature	*South Fork Palouse River Watershed Assessment and TMDLs*, February 2007. Approved October 2007.
South Fork Palouse River (WA portion)	South Fork (SF) Palouse River 6712 (WA-34-1020) SF Palouse River 6711 (WA-34-1020) SF Palouse River 6710 (WA-34-1020) SF Palouse River 6707 (WA-34-1020)	Fecal coliform bacteria PCBs	*South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060 October 2009. Approved 2009. *Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan;* Publication No. 07-03-018 *July 2007.* Approved November 2007.
Snake River	ID17060103SL001_08- *Snake River - Asotin River (Idaho/Oregon border) to Lower Granite Dam pool*	*Temperature*	No TMDL completed.
Tammany Creek	ID17060103SL014_02 *Tammany Creek - WBID 015 to unnamed tributary* ID17060103SL014_03 *Tammany Creek - Unnamed Tributary to mouth* ID17060103SL016_02 *Tammany Creek-source to Unnamed Tributary (T34N, R04W, Sec19)*	*E. coli* Nitrogen, Nitrate Total Phosphorus Sedimentation/ Siltation	*Tammany Creek Watershed (HUC 17060103) TMDL Addendum;* September 2010. Approved December 2010.
Lower Granite Dam Pool	ID17060306CL001_07 *Lower Granite Dam Pool*	None- Fully Supporting beneficial uses.	Not applicable.
Lindsay Creek	ID17060306CL003_02 Lindsay Creek -*Source to mouth* ID17060306CL003_03 Lindsay Creek - *Source to mouth*	*E.* coli Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation	*Lindsay Creek Watershed Assessment and Total Maximum Daily Loads*, December 2006, Amended March 2007. Approved, June 2007.

Appendix 6: Rationale for Requirements Based on MS4 Discharges to Impaired Waters without an Applicable TMDL.

This Appendix provides EPA's rationale for the additional SWMP requirements for affected MS4 permittees discharging into impaired waters, pursuant to MS4GP Part 4.2. ***NOTE: THIS APPENDIX MUST BE REVIEWED FOR ACCURACY & CONSISTENCY WITH PROPOSED MS4GP PROVISIONS PRIOR TO THE FORMAL PUBLIC COMMENT PERIOD***

A. Coeur d'Alene Lake and Spokane River in Idaho

Summary: Continued monitoring of storm water discharges is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Coeur d'Alene	Coeur d'Alene Lake	ID17010303PN001L_0L *Coeur d'Alene Lake*	Cadmium; Lead; Zinc	No TMDLs completed.
Coeur d'Alene	Spokane River	ID17010305PN004_04 Spokane R.-Coeur d'Alene Lake to Post Falls Dam ID17010305PN003_04 Spokane R.- Post Falls Dam to ID/WA border	Cadmium; Lead; Total Phosphorus; Zinc	

Discussion: IDEQ's *2012 Integrated CWA Section 303(d)/Section 305(b) Report* (2012 Integrated Report), Appendix J [*Category 5 (CWA §303(d) list)—waters of the state for which a TMDL is needed*] lists Coeur d'Alene Lake as impaired for cadmium, lead, and zinc.

The 2012 Integrated Report also lists the segments of the Spokane River in Idaho listed above as impaired for cadmium, lead, total phosphorus, and zinc.

Affected MS4 permittees discharging to these waterbodies include the City of Coeur d'Alene, City of Post Falls, Idaho Transportation Department District #1, and Post Falls Highway District.

No TMDLs have been established for the impairment pollutants in these water bodies.[62] Existing water quality information for Coeur d'Alene Lake shows that maintaining an oxygenated condition in the

[62] In 2000, DEQ and EPA completed a metals TMDL for the Coeur d'Alene River subbasin, including Coeur d'Alene Lake, and the segment of the Spokane River where the City's MS4 outfalls are located. The Idaho Supreme Court subsequently ruled that the required rule making procedures were not followed in setting the TMDL, making it null and void. State legislation in 2003 clarified that for all other waters in Idaho, rule making procedures are not required for TMDLs. The legislation, however, kept the rule making requirement identified by the Idaho Supreme Court in place for a metals TMDL for the Coeur d'Alene River subbasin. To date, there is no EPA approved metals TMDL for the lake, for either State or Tribal areas. Because the State court invalidated the Coeur d'Alene River Basin TMDL under State law, there is no longer an EPA approved TMDL for the Lake or relevant section of the Spokane River. Accordingly, EPA is not required by 40 CFR122.44(d)(1)(vii)(B) to establish permit requirements that are consistent with the assumptions and requirements of the invalidated TMDL's wasteload allocations

bottom waters minimizes the release of dissolved metals from the sediments into the overlying waters. The Coeur d'Alene Tribe and IDEQ collaboratively developed the 2009 *Coeur d'Alene Lake Management Plan* (2009 LMP) to protect and improve lake water quality by limiting nutrient inputs that impair lake water quality conditions; excess nutrient loading subsequently influences the solubility of mining-related metals contamination in lake sediments. The 2009 LMP sets lake management goals, objectives, and strategies, including specific actions for water quality management of Coeur d'Alene Lake and its tributaries. The Tribe and IDEQ view the 2009 LMP as a functional equivalent to a nutrient TMDL, and using existing regulatory tools to address nutrient and sediment inputs to Coeur d'Alene Lake is consistent with the 2009 LMP.

The MS4GP requirements are consistent with the LMP's management actions for public outreach and education and controlling erosion and sediment from construction activities and from roadway surfaces.[63]

EPA previously required the City of Coeur d'Alene and the Idaho Transportation Department District #1 to monitor select MS4 outfalls in acknowledgement of IDEQ's interest in characterizing nutrients and metals in MS4 discharges to the Lake and to Spokane River to understand pollutant loading from urban sources. EPA also required the City of Post Falls to monitor their MS4 discharges into the Spokane River.

Data collected by the Cities and ITD District #1 thus far is insufficient to assess the effectiveness and adequacy of existing SWMP control measures. However, MS4 outfall monitoring locations are now established, and EPA believes that continued data collection is necessary to define pollutant loading from the MS4s.

New MS4 maps submitted by the Post Falls Highway District in compliance with the previously issued MS4 permit confirms the Post Falls Highway District is also an affected MS4 permittee, based on the identification of MS4 outfalls discharging into Spring Creek and other tributaries to the Spokane River.

Conclusion: In MS4GP Appendix F.1 , EPA requires the affected MS4 permittees discharging to Coeur d'Alene Lake (City of Coeur d'Alene and Idaho Transportation Department District #1) to continue the storm water monitoring data collection efforts begun under the prior MS4 permit term(s). Similarly, the affected MS4 permittees discharging to the Spokane River (City of Coeur d'Alene, Idaho Transportation District #1, City of Post Falls, and Post Falls Highway District) must continue the storm water monitoring data collection efforts begun under the prior MS4 permit term(s). EPA recommends that the affected MS4 permittees work collaboratively to collect data that meets the data quality objectives identified in the existing Quality Assurance Plans.

B. Spokane River Downstream of the ID/WA border

Summary: Additional SWMP control measures, and continued monitoring of storm water discharges, is necessary and appropriate to address PCB- impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Coeur d'Alene	Spokane River	*Spokane R.- downstream of the ID/WA border*	Polychlorinated Biphenyls (PCBs)	No TMDL completed.

[63] See: Tables C1 and C3 of the *Coeur d'Alene Lake Management Plan* (IDEQ & Coeur d'Alene Tribe, March 2009).

The Washington Department of Ecology's (Ecology) *2012 Water Quality Assessment Report* lists the Spokane River, downstream of the Idaho/Washington border, as not meeting the water quality standards for polychlorinated biphenyls (PCBs). Ecology's current water quality criterion for total PCBs is 170 picograms per liter (pg/L). In January 2015, Ecology proposed revisions to its water quality criteria established to protect human health; including a generally applicable narrative water quality criterion that "*[a]ll waters shall maintain a level of water quality when entering downstream waters that provides for the attainment and maintenance of the water quality standards of those downstream waters, including the waters of another state."* The waters of the Spokane Tribe are located downstream from the segments of the Spokane River that Ecology considers impaired. The Tribe's water quality criterion for total PCBs, approved by EPA in 2013, is 1.3 pg/L, more than two orders of magnitude lower than the current Washington criterion, and perhaps the lowest PCB criterion in the country.[64]

In response to a U.S District Court order and remand pertaining to the status of a TMDL to address the PCB impairment, (and in consultation with Ecology), EPA developed a plan (Plan) outlining significant regulatory and non-regulatory actions necessary to identify and address sources of PCB pollution in the Spokane River. EPA provides the context regarding PCB contamination in the River, and the recommendations for further control of PCB sources in order to attain both Ecology's and the Spokane Tribes' PCB water quality criteria. If the Spokane River remains impaired for PCBs after recommended actions are completed, the Plan requires Ecology to initiate a TMDL addressing PCB impairment by no later than July 15, 2028, and finalize that TMDL no later than July 1, 2030.

MSGP Appendix F.2 outlines additional requirements for affected MS4 permittees discharging to the Spokane River: City of Coeur d'Alene, City of Post Falls, Post Falls Highway District, and Idaho Transportation Department District #1. The SWMP activities and monitoring reflect EPA's recommended NPDES permit conditions for regulated small MS4 discharges, and, when fully implemented, EPA expects these actions to contribute to the necessary PCB loading reductions into the Spokane River.[65]

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[64] See: *EPA's Plan for Addressing PCBs in the Spokane River, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015),* pages 3-5.

[65] See *EPA's Plan for Addressing PCBs in the Spokane River, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015)* Appendix B pages. 5-8.

C. Lower Boise River

Summary: Continued monitoring of storm water discharges is necessary and appropriate to address temperature-impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Boise/ Nampa	Boise River	ID17050114SW011a_06 *Boise R.-Diversion Dam to Veterans Memorial Pkwy* ID17050114SW005_06 *Boise R. Veterans Memorial Parkway to Star Bridge* ID17050114SW005_06a *Boise R.-Star to Middleton* ID17050114SW005_06b *Boise R.-Middleton to Indian Creek* ID17050114SW001_06 – *Boise R.-Indian Creek to the mouth*	Temperature	No TMDL completed.

Discussion: IDEQ's 2012 Integrated Report, Appendix J, lists the segments of the Boise River listed above as impaired for temperature; no TMDLs are established.

Affected MS4 permittees discharging to these waterbodies include, but are not limited to, ACHD, Idaho Transportation Department District #3, , Nampa, Caldwell, Nampa Highway District, and Canyon Highway District.

Conclusion: In MSGP Appendix F.4, EPA requires affected MS4 permittees to monitor MS4 discharges for temperature. Temperature was previously included as a required parameter under the Boise/Garden City Area Phase I MS4 Permit as a condition of IDEQ's certification of that permit under CWA Section 401, and is now a required parameter for all Affected MS4 Permittees that discharge to these impaired segments.

EPA is not requiring additional SWMP control measures to address temperature impairments at this time.

D. Indian Creek

Summary: Monitoring of storm water discharges for temperature is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Indian Creek	ID17050114SW002_04 *Indian Creek - Sugar Ave. to Boise River*	Temperature; Cause Unknown (Nutrients Suspected)	No TMDL completed.
Nampa	Indian Creek	ID17050114SW003a_04 *Indian Creek - New York Canal to Sugar Avenue*	Temperature; Cause Unknown; (Nutrients suspected)	

Discussion: IDEQ's 2012 Integrated Report, Appendix J lists these segments of Indian Creek as impaired for temperature; nutrients are suspected to also contribute to the impairment. No TMDLs have yet been established.

Affected MS4 permittees discharging to Indian Creek include Nampa, Caldwell, Nampa Highway District, and Canyon Highway District.

Conclusion: In MSGP Appendix F.4, EPA requires monitoring of storm water discharges for temperature and continued monitoring for total phosphorus.

EPA is not requiring additional SWMP control measures at this time. Implementation of the SWMP control measures in the MS4GP Part 3 will substantively reduce sediment loadings, which in turn will reduce phosphorus loading through the MS4. These measures include enforceable requirements for erosion and sediment control, and permanent storm water management controls for site development disturbing 5,000 square feet or more. In addition, proper operation and maintenance of roadway surfaces (including regular street sweeping) will enhance the management of sediment solids. These measures, combined with the enhanced illicit discharge assessment activities required to address the LBR Phosphorus TMDL are sufficient to address and assess the urban storm water contribution to the impairments to Indian Creek.

E. Mill Slough

Summary: Monitoring of storm water discharges for temperature is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Mill Slough	ID17050114SW005_02 *Mill Slough and Phyllis Slough*	Temperature	No TMDL has been completed

Discussion: IDEQ's 2012 Integrated Report, Appendix J lists Mill Slough as impaired for temperature; no TMDLs have been established.

The affected MS4 permittee discharging to this waterbody is the City of Middleton.

Conclusion: In MSGP Appendix F.4, EPA requires monitoring of storm water discharges for temperature. EPA is not requiring additional SWMP control measures to address temperature impairments at this time. Implementation of the SWMP control measures in the MS4GP Part 3 is sufficient to address and assess the contribution of urban storm water to temperature impacts in the Mill Slough.

F. Mason, Fifteenmile, Tenmile, and Fivemile Creeks

Summary: Continued monitoring of storm water discharges is necessary and appropriate to address impaired waters without an applicable TMDL. EPA adds chlorpyrifos and malathion to the list of pollutant parameters to be monitored.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Mason Creek	ID17050114SW006_02 *Mason Creek - entire watershed*	Temperature; Chlorpyrifos; Malathion; Cause unknown (Nutrients suspected)	No TMDL completed.
Nampa	Fifteenmile Creek	ID17050114SW007_04- *Fifteenmile Creek - 4th order (Fivemile Creek to mouth)*	Chlorpyrifos;	
Nampa	Tenmile Creek	ID17050114SW008_03- *Tenmile Creek - 3rd order below Blacks Creek Reservoir*	Chlorpyrifos; Cause Unknown (Nutrients suspected)	No TMDL completed.
Nampa	Fivemile Creek	ID17050114SW010_03- *Fivemile Creek - 3rd order tributaries*	Chlorpyrifos; Cause Unknown (Nutrients suspected)	

Discussion: IDEQ's 2012 Integrated Report, Appendix J, lists Mason, Fifteenmile, Tenmile, and Fivemile Creeks as impaired for the agricultural pesticide chlorpyrifos; Mason Creek is also listed for temperature and malathion. Mason, Tenmile, and Fivemile Creeks are also suspected to be impaired for nutrients. No TMDLs for these pollutants in these waters have yet been established.

Affected MS4 permittees discharging to these waters include ACHD, Nampa, and Caldwell.

Conclusion: In MSGP Appendix F4, EPA requires monitoring of storm water discharges for temperature. EPA is not requiring additional SWMP control measures to address temperature, pesticides, or suspected nutrient impairments at this time. Implementation of the SWMP control measures in the MS4GP Part 3 are sufficient to address and assess the contribution of urban storm water to these impairments in Mason, Fifteenmile, Tenmile, and Fivemile Creeks.

G. Snake River

Summary: Monitoring of storm water discharges is necessary and appropriate to address impaired waters without an applicable TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Lewiston	Snake River	ID17060103SL001_08- *Snake River - Asotin River (Idaho/Oregon border) to Lower Granite Dam pool*	Temperature	No TMDL completed.

Discussion: IDEQ's 2012 Integrated Report, Appendix J, lists the portion of the Snake River cited above as impaired for temperature. No TMDL has been completed.

Regulated small MS4s discharging to this portion of the Snake River includes, but is not limited to, the City of Lewiston, ITD District #2, and the U.S. Army Corps of Engineers. City of Lewiston, and potentially other regulated small MS4s discharging to this portion of the Snake River, has not yet fully implemented a comprehensive Storm water Management Program in compliance with an applicable NPDES permit for MS4 discharges.

Conclusion: In MSGP Appendix F.6, EPA requires monitoring of storm water discharges into the impaired segment of the Snake River for temperature. EPA is not requiring additional SWMP control measures to address temperature impairments at this time. Implementation of the SWMP control

measures in the MS4GP Part 3 is sufficient to address the contribution of urban storm water to this impairment.

Appendix 7: Rationale for Requirements to Comply with Applicable TMDLs

This appendix contains EPA's rationale for the additional SWMP requirements pursuant to the MS4GP Part 4, and detailed in MS4GP Appendix F, for affected MS4 Permittees.
NOTE: THIS APPENDIX MUST BE REVIEWED FOR ACCURACY & CONSISTENCY WITH PROPOSED MS4GP PROVISIONS PRIOR TO THE FORMAL PUBLIC COMMENT PERIOD

This appendix also provides EPA's rationale to not include otherwise applicable TMDLs in MS4GP Appendix F, where EPA has determined that compliance with the MS4GP constitutes compliance with the WLAs for those Affected MS4 Permittees.

A. Fernan Lake

Summary: EPA requires no additional SWMP requirements for affected MS4 permittees to ensure compliance with the WLAs in the applicable TMDL for Fernan Lake. Implementation of the comprehensive SWMP (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

Urbanized Area	Receiving Water	Waterbody Assessment Unit	Impairment Pollutant	TMDL Status
Coeur d'Alene	Fernan Lake	ID17010303PN033_0L *Fernan Lake*	Total Phosphorus	*Coeur d'Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum*, October 2013. Approved November 2013.

Discussion: Fernan Lake does not meet the Idaho WQS narrative criteria due to periodic blooms of blue-green algae. In the *Coeur d'Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum* (Fernan Lake TMDL), approved by EPA on November 6, 2013, IDEQ established a total phosphorus (TP) target of 20 µg/L for all sources, and a target load reduction from current conditions of 35% is assigned to all contributing sources.[66]

Regulated small MS4s discharging to Fernan Lake include City of Coeur d'Alene, Idaho Transportation Department and Eastside Highway District from the MS4 Permit Area.[67]

The Fernan Lake TMDL states that regulated small MS4s must implement a comprehensive SWMP to control pollutants in storm water discharges to the maximum extent practicable. The TMDL does not specify any additional, mandatory actions or activities for regulated small MS4 discharges. Compliance with the load reduction targets will be determined using data collected by the Citizen's Volunteer Monitoring Program from the Fernan Lake deep monitoring station. No TMDL Implementation Plan for

[66] See: *http://www.deq.idaho.gov/media/1075241-cda_lake_river_sba_tmdl_fernan_lake_addendum_1013.pdf*; in particular, see: Figure 17- *Map of the 2010 Census-Delineated Urbanized Area near Fernan Lake* (page 35) and Table 16- *TP load allocations for Fernan Lake, by source* (page 60).

[67] See *Fernan Lake TMDL Appendix B.*

Fernan Lake exists at this time. IDEQ expects attainment of the beneficial uses in Fernan Lake within 20 years (by Year 2033).

Conclusion: SWMP control measures in MS4GP Part 3 will reduce sediment and total phosphorus loading in discharges from the MS4s operated by the entities listed above. These measures include enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures. Implementation of the comprehensive SWMP by City of Coeur d'Alene, Idaho Transportation Department and Eastside Highway District is fully consistent with the Fernan Creek TMDL. No additional requirements are necessary to ensure compliance with the load reduction target/WLA assigned to these MS4 discharges.

B. Hayden Lake

Summary: There are no WLAs established by the EPA-approved TMDL for Hayden Lake. Implementation of the comprehensive SWMP by Lakes Highway District (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

Urbanized Area	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Coeur d'Alene	Hayden Lake	ID17010305PN005L_0L *Hayden Lake*	Total Phosphorus	*Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305)*, November 2000. Approved January 2001.[68]

Discussion: Hayden Lake does not meet the Idaho WQS narrative criteria due to periodic algae blooms. EPA approved the *Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305)* (Hayden Lake TMDL) on January 31, 2001. IDEQ established a TP target of 7 µg/L for the lake, and a TP load reduction target of 10.7% from all nonpoint sources discharging into the lake, including residential storm water runoff. IDEQ did not assign WLAs to any point sources discharging into Hayden Lake.[69]

The Hayden Lake Watershed Association continues to provide ongoing public education resources regarding appropriate best management practices for homeowners that serve to reduce sediment and associated phosphorus loading into Hayden Lake.

Lakes Highway District operates roadside storm water conveyances within the MS4 Permit Area in unincorporated Kootenai County at the southern end of Hayden Lake. Lakes Highway District must continue to implement SWMP control measures as described in the MS4GP Part 3. These required SWMP measures will substantively reduce sediment and associated total phosphorus loading from the MS4, and include enforceable requirements for erosion and sediment control; onsite storm water

[68] The TMDL is available online at http://www.deq.idaho.gov/media/452833-upper_spokane_entire.pdf

[69] See: Hayden Lake TMDL, pages 31-35.

management controls for road development occurring at project sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA encourages Lakes Highway District to work cooperatively with the Hayden Lake Watershed Association to continue using effective erosion control strategies in sub-sewershed drainage areas that could affect Hayden Lake water quality.

Conclusion: Lakes Highway District continued implementation of the comprehensive SWMP is consistent with the EPA-approved TMDL for Hayden Lake; no additional requirements are necessary to ensure compliance with the Hayden Lake TMDL's target for total phosphorus.

C. Portneuf River

Summary: EPA requires additional SWMP requirements in MS4GP Appendix F.1 for affected MS4 permittees discharging to the Portneuf River. Additional requirements are necessary to comply with the WLAs established in the EPA-approved Portneuf River TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Pocatello	Portneuf River	ID17040208SK001_05 *Portneuf R.-Marsh Creek to American Falls Reservoir*	Total Nitrogen Oil and Grease Total Phosphorus *E. coli* Sedimentation/ Siltation	*Portneuf River TMDL*, April 2001. *Portneuf River TMDL Revision and Addendum* February 2010. Approved July 2010. [70]
	Pocatello Creek	ID17040208SK025_02 *South Fork Pocatello Creek - source to mouth*	Sedimentation/ Siltation	

Discussion: The main stem Portneuf River within the MS4 Permit Area does not meet the Idaho water quality standards narrative criteria for *E.coli*, nutrients (Total Phosphorus), oil and grease, and sedimentation/siltation. The *Portneuf River TMDL Revision and Addendum* (Portneuf TMDL) approved by EPA on July 29, 2010, quantifies pollutant sources, and allocates responsibility for load reductions needed to meet water quality standards and/or the targets described therein.[71]

Regulated small MS4s that discharge directly or indirectly to the Portneuf River within the MS4 Permit Area includes City of Chubbuck; City of Pocatello; Bannock County; Idaho State University and Idaho Transportation Department District #5.

IDEQ assigned urban storm water WLAs to the NPDES-regulated small MS4s discharging to the Portneuf River main stem for total phosphorus, and oil & grease. IDEQ defined load reduction targets for suspended sediment and *E. coli*.

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[70] Available online at : http://deq.idaho.gov/media/464542_water_data_reports_surface_water_tmdls_portneuf_river_portneuf_river_revision_addendum_final.pdf

[71] See *Portneuf River TMDL Revision and Addendum* (Portneuf TMDL) : http://deq.idaho.gov/media/464542_water_data_reports_surface_water_tmdls_portneuf_river_portneuf_river_revision_addendum_final.pdf

The Portneuf TMDL sets TSS target concentrations for the main stem at 35 mg/L (low flow) and 80 mg/L (high flow), and TP targets for the main stem of 0.07 mg/L (low flow) and 0.125 mg/L (high flow). Corresponding WLAs for the MS4 Permittees represent the median daily TSS and TP loads translated from daily turbidity monitoring data collected during calendar years 2004 through 2006 and relevant instream monitoring stations upstream of Pocatello at the Edson Fichter Nature Area (ENFA) at River Mile 22.5, and downstream of Pocatello at Batiste Road at River Mile 13.4. IDEQ used the difference in discharge between Batiste and EFNA monitoring stations and the corresponding TSS and TP targets to estimate storm water target loads/load allocations. The affected MS4 Permittees must reduce TSS and TP by up to 84% and 75%, respectively (during high flow/wet weather events occurring typically in the month of April)in order to meet the TMDL's most stringent monthly targets.[72]

The Portneuf TMDL establishes an oil and grease WLA target of 5 mg/L. Prior monitoring indicates oil and grease is present in the Portneuf River as it passes through the Pocatello UA, entering through storm drains during or immediately following storm events. IDEQ's TMDL recommends regular and event-focused monitoring of oil and grease to describe background concentrations and characterize their temporal and spatial loading patterns in the lower Portneuf River. Where possible,affected Permittees should consider using BMPs to minimize oil and grease loading to the River.[73] The Permittees continue to impose such BMPs. For example, in 2015, the City of Pocatello and IDEQ began collaborating with a major industrial landowner in the UA to identify structural BMP project(s) to mitigate pollutant contributions entering through the City's MS4 to the River. EPA strongly encourages such collaborative projects to continue during the MS4 General Permit.

The Portneuf TMDL establishes a load reduction target for *E.coli* of 126 organisms/100 mL, corresponding with water quality criteria for secondary contact recreation.[74]

No specific timeframe is established by DEQ in the Portneuf TMDL for attaining beneficial uses in the main stem of the Portneuf River. The TMDL states, however, that:

> "S*ubstantial progress towards the reduction of current pollutant loads is expected to occur within the next 10 years….Development of appropriate monitoring programs is vital to understanding the success of individual BMPs and to quantify the benefits to subwatersheds and the larger subbasin.*" [75]

The TMDL states that targeted and continuous sampling of storm water discharges is necessary to characterize the concentration of constituents introduced into the Portneuf River during precipitation or melting events. IDEQ recommends sampling of multiple storm water outfalls to characterize the range of variation detected among outfalls. Instream sampling is necessary to estimate storm water loads associated with urban sources within the Pocatello UA.

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[72] See Portneuf TMDL, Table 5.4-page 110, and Table 5.8-page 118.

[73] See Portneuf TMDL, page 129-131.

[74] See Portneuf TMDL, pages 95-96.

[75] See Portneuf TMDL, page 154.

The TMDL further recommends that sampling of storm water discharges is appropriate to evaluate the efficacy of storm water BMPs, citing two existing storm water basins used by City of Pocatello that successfully treat storm water within the UA (near First Street and at Day Street-Sacajawea Park, respectively).[76] EPA encourages the MS4 permittees, collectively, to pursue both structural and treatment practices within the UA. Based on the data collected during the previous MS4 permit term, EPA recommends that the affected MS4 permittees consider locating future structural treatment devices in drainage areas leading to the Halliday and Lander Street outfalls. [77]

Conclusion: Continued implementation of the comprehensive SWMPs by City of Pocatello, City of Chubbuck, Bannock County, Idaho Transportation Department District #5 and Idaho State University (as directed in MS4GP Part 3) is consistent with the Portneuf TMDL as approved by EPA.

The SWMP control measures in the MS4GP Part 3 will substantively reduce sediment and associated total phosphorus loading into the MS4s, and will include enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.

Monitoring of both storm water discharges and instream water quality is necessary to assess compliance with the applicable WLAs and load reduction targets. MS4GP Appendix Part F.3 requires storm water discharge monitoring at the currently monitored outfall locations; storm water outfall monitoring is appropriate to ensure compliance with the load reduction targets/WLAs assigned to these affected MS4 discharges.

D. Lower Boise River

Summary: EPA requires additional SWMP requirements in MS4GP Appendix F.2 for affected MS4 permittees discharging to segments of the Lower Boise River (LBR) for which EPA-approved TMDLs for sediment, bacteria, and total phosphorus apply.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Boise/ Nampa	Boise River	ID17050114SW001_06 *Boise R. - Indian Creek to mouth* ID17050114SW005_06 *Boise R.-Veterans Memorial Pkwy to Star Bridge* ID17050114SW005_06a- *Boise R –Star to Middleton* ID17050114SW005_06b *Boise R.-Middleton to Indian Creek*	Fecal Coliform Sedimentation /Siltation	*Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads,* September 1999. Approved January 2000. *Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL,* April 2008. Approved 2008.

[76] See Portneuf TMDL, Page 87

[77] See Portneuf TMDL, Page 92.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Urbanized Area/City	**Receiving Water**	**Waterbody Assessment Unit**	**Impairment Pollutant**	**TMDL Status**
Boise/ Nampa	Boise River	ID17050114SW001_06 – *Boise R.-Indian Creek to the mouth* ID17050114SW005_06b *Boise R-Middleton to Indian Creek*	Total Phosphorus	*Lower Boise River TMDL: Subbasin Assessment, Total Maximum Daily Loads* (September 1999. Approved January 2000. *Lower Boise River TMDL 2015 Total Phosphorus Addendum*. August 2015. Approved December 2015.

1. Discussion of LBR Sediment and Bacteria WLAs

In 1999, IDEQ originally established the Lower Boise River TMDL: Subbasin Assessment, Total Maximum Daily Loads (1999 LBR TMDL) for sediment and bacteria impairments in the segments representing the main stem of the Lower Boise River.

Regulated small MS4s discharging directly or indirectly to the main stem LBR from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties include: ACHD, Boise, Garden City, Ada County Drainage District #3, Boise State University, City of Middleton; City of Caldwell; City of Nampa; Idaho Transportation District #3; Ada County; Canyon Highway District #4; and Nampa Highway District #1.

The 1999 LBR TMDL establishes sediment allocations for reaches of the LBR upstream of Middleton equal to the 1995 baseline conditions (e.g. , the allocations represent a 0% reduction in sediment, or no net increase). The TMDL considers urban and suburban land uses upstream of Middleton as contributing sediment sources to the main stem LBR, and states that the comprehensive municipal SWMP, as implemented through a NPDES permit, is likely sufficient to meet the sediment TMDL allocations.[78]

IDEQ's bacteria TMDL assigned estimated bacteria load allocations to various tributaries based on meeting a fecal coliform target concentration. The TMDL estimates that more than 70% of the nonpoint source bacteria load must be reduced from the area upstream of the Middleton compliance point.[79] In 2007, IDEQ revised its WQS indicator for bacteria from fecal coliform to *E. coli*, represented as 126 cfu/100 ml, based on the geometric mean of five samples taken 3-7 days apart over a 30-day period. The *2003 Implementation Plan for the Lower Boise Watershed* (2003 LBR Plan) references the federal NPDES storm water requirements, and cites a menu of activities expected to reduce sediment and bacteria

[78] See: *Lower Boise River TMDL Subbasin Assessment* (1999), Table 14, pg 58-61.

[79] See *Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads*, Revised: September 29,1999; pages 70-72; *http://www.deq.idaho.gov/media/451243-_water_data_reports_surface_water_tmdls_boise_river_lower_boise_river_lower_entire.pdf*

from upstream urban and suburban land uses, such as: targeted public education, construction site runoff control, and on-site management of post-construction runoff from new development and redevelopment.[80]

Conclusion, Sediment and Bacteria: In addition to implementation of comprehensive SWMPs by each regulated small MS4 as directed in MS4GP Part 3, EPA is proposing three additional SWMP control measures to address the allocations for MS4 discharges of sediment and bacteria established by the LBR Sediment and Bacteria TMDL. These SWMP actions further support the pollutant reduction goals of the Lower Boise River TMDLs by requiring the permittees to focus their assessment, education, and enforcement efforts on facilities that are most likely to discharge pollutants of concern. Permittees may model or replicate the similar programs currently conducted within the Boise/Garden City Phase I MS4 Permit Area by the Ada County Highway District, City of Boise, City of Garden City, and the other Phase I MS4co-permittees.

- Affected MS4 permittees must maintain an inventory and map of certain industrial and commercial activities, including all animal related facilities, within the Permit Area to target and reduce the discharge of sediment and bacteria from industrial and commercial operations to the MS4.

- The purpose of the inventory is to assist permittees in identifying problem areas, with particular emphasis on sources likely to contribute sediment or bacteria to receiving waters. To ensure the inventory and map are current and accurate permittees should update both inventory and map at least semi-annually using information obtained from field activities and intra-agency sources (such as business licenses, pretreatment permits, sanitary sewer hookups, etc.)

- For any facilities identified as needing separate NPDES permit coverage under the federal storm water requirements, the affected MS4 permittees may inform facilities of their obligation directly, and/or may notify EPA by providing basic facility information through EPA's compliance program for further Agency action.

- Affected MS4 permittees must collectively identify at least two specific industrial/commercial activities not adequately addressed through existing programs within the watershed, develop best management practices for each activity, and educate selected industrial/commercial audiences regarding performance expectations. Examples of such activities may include mobile power washing services; commercial car/truck washing operations; restaurant and/or fast food services; commercial animal services, such as kennels; wholesale or retail agricultural and construction supply businesses; urban agricultural activities; home gardening or agricultural supply establishments; landscaping businesses; and automobile repair shops.

[80] See: *Implementation Plan for the Lower Boise TMDL,* December 2003, *http://www.deq.idaho.gov/media/451449-water_data_reports_surface_water_tmdls_boise_river_lower_boise_river_lower_plan_entire.pdf*

- Affected MS4 permittees must cooperatively prioritize and inspect such inventoried industrial and commercial facilities/activities that discharge to receiving waters and/or to the MS4s, to educate such facilities about the control of the pollutants of concern.

MS4GP Appendix Part F.4 requires that storm water discharge monitoring for sediment and bacteria occur at the existing outfall locations currently monitored by Middleton, Caldwell, Nampa, ITD District #3, and ACHD. EPA encourages a watershed-based approach to such assessment efforts, and is interested in defining specific requirements that will fulfill the necessary objectives of the 2003 LBR Plan implementation efforts. EPA believes that continued outfall monitoring data will substantiate any future modelling efforts to estimate pollutant loading from MS4 outfalls. Monitoring is therefore appropriate and necessary for IDEQ and EPA to determine compliance with the load reduction targets/WLAs assigned to the affected MS4 discharges.

2. Discussion of the LBR Total Phosphorus WLAs

The Lower Boise River, from Middleton to its confluence with the Snake River, does not meet the narrative criteria for excess nutrients in the Idaho WQS. The *Lower Boise River TMDL 2015 Total Phosphorus Addendum* (LBR Phosphorus TMDL), approved by EPA on December 22, 2015, quantifies TP pollutant sources, and identifies responsibility for load and waste load allocations needed to achieve the WQS.[81] IDEQ's numeric target to describe nuisance aquatic growth within impaired AUs of the main stem lower Boise River is the mean monthly benthic (periphyton) chlorophyll a $\leq$ 150 mg/m^2, year round.[82]

Regulated small MS4s that discharge directly or indirectly to the main stem LBR from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties are the same as listed above: ACHD, Middleton; Caldwell; Nampa; Idaho Transportation District #3; Canyon Highway District #4; and Nampa Highway District #1.

IDEQ assigned two types of WLAs for total phosphorus to these NPDES-regulated small MS4s discharging to the LBR: one WLA for storm water discharges occurring during wet weather, representing a 42% TP load reduction on average across all regulated small MS4s; and a second WLA for dry weather discharges from MS4s, representing an 84% TP load reduction on average across all MS4s.

IDEQ acknowledges that it based the WLAs and load reduction targets on limited data and conservative assumptions. Because the plumbing of MS4 systems is intricate, and the quantity of the non-storm water inputs is unknown, IDEQ asked MS4 permittees to provide initial estimates for the percentage of their non-storm water discharge that originates from nonpoint sources. IDEQ expects these estimates to be refined through monitoring and mapping in future permit cycles and as part of TMDL implementation. Further, IDEQ recommends that TMDL-related activities be determined on a watershed basis, such that all regulated small MS4 entities are conducting the same or similar types of actions. EPA agrees that it is necessary to verify all existing MS4 outfalls discharging during dry weather, and to characterize such

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[81] See: LBR Phosphorus TMDL at: *http://www.deq.idaho.gov/media/60177413/lower-boise-river-tmdl-total-phosphorus-addendum-0815.pdf*.

[82] LBR Phosphorus TMDL, page 64.

flows by type and source. It is also necessary to confirm whether such ground water and/or irrigation water flows are indeed uncontaminated. If dry weather flows from the MS4 are uncontaminated, they may be allowable non-storm water discharges, as conditionally provided by MS4GP Part 2.2.5.

IDEQ states that it encourages discharge or pollutant trading (between with other sectors and sources) to facilitate cost effective load reductions. The TMDL recognizes that retrofitting the existing infrastructure may require considerable time and resources; and recommends that runoff from new urban development be managed carefully, using appropriate BMPs consistent with the overall TP reduction goals.[83]

Conclusion, *Wet Weather WLA:* To address the WLA for wet weather discharges established by the LBR Phosphorus TMDL:

1. EPA determines that continued implementation of the comprehensive SWMPs, as directed in MS4GP Part 3 by each regulated small MS4, is sufficient to meet the numeric target for nuisance aquatic growth in the LBR, and that no additional SWMP requirements are necessary at this time. Specific SWMP control measures in the MS4GP Part 3 include enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). These practices, imposed throughout the Permit Area, will result in reductions of total phosphorus loading from the MS4s during wet weather. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.[84]

2. MS4GP Appendix Part F.4 requires that storm water discharge monitoring for total phosphorus and total nitrogen occur at the existing outfall locations currently monitored by Middleton, Caldwell, Nampa, ITD District #3, and ACHD. EPA encourages a watershed-based approach to such assessment efforts and is interested in defining specific requirements that will fulfill the necessary objectives of the LBR Phosphorus TMDL implementation efforts. EPA believes that continued SW outfall monitoring data will substantiate future modelling efforts to estimate pollutant loading from MS4 outfalls. Monitoring is therefore appropriate and necessary for IDEQ and EPA to determine compliance with the load reduction targets/WLAs assigned to the affected MS4 discharges. As IDEQ acknowledges uncertainty in the assumed loading from wet weather/storm water MS4 discharges, and states that this uncertainty will be addressed during implementation planning through additional monitoring, and/or further characterization of storm water; such characterization activities may include additional modeling.[85]

Conclusion, *Dry Weather WLA:* To address the WLA for dry weather discharges established by the LBR Phosphorus TMDL, all affected MS4 permittees must conduct enhanced dry weather screening surveys to locate and document the occurrence of dry weather discharges from their MS4s, in addition to the mapping and discharge screening requirements for Illicit Discharge Management in MS4GP Part 3.5. The affected Permittees must monitor identified dry weather flows, in order to distinguish between groundwater and agricultural sources. Such diagnostic testing can be conducted using field test

[83] LBR Phosphorus TMDL page 98
[84] LBR Phosphorus TMDL pages 93-100
[85] See LBR Phosphorus TMDL pages 74 and 86.

parameters and protocols recommended by EPA guidance.[86] These additional actions are necessary in order to begin the multi-year (and possibly multi-permit term) effort to field verify the location of all existing MS4 outfalls discharging to the LBR during dry weather; in addition, identified dry weather flows should be sufficiently characterized to confirm whether such flows originate from ground water and/or irrigation. Finally, identified dry weather flows must be mitigated as necessary so that the discharges are indeed uncontaminated (and therefore, qualify as "allowable") non-storm water discharges from the MS4.

E. Indian, Mason, Fifteenmile, Tenmile, Fivemile, and Willow Creeks

Summary: EPA requires additional SWMP requirements in MS4GP Appendix F.4 for affected MS4 permittees discharging to segments of the waterbodies listed above for which EPA-approved TMDLs for sediment, and bacteria apply.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Nampa	Indian Creek	ID17050114SW002_04 *Indian Creek - Sugar Ave. to Boise River* ID17050114SW003b_03 *Indian Creek Reservoir to New York Canal* ID17050114SW003d_02 *Indian Creek above Reservoir – 1st and 2nd order* ID17050114SW003d_03 *Indian Creek above Reservoir – 3rd order*	Sediment, *E. coli*	*Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.
Nampa	Mason Creek	ID17050114SW006_02 Mason Creek - entire watershed	Sediment, *E. coli*	
Nampa	Fifteenmile Creek	ID17050114SW007_04- *Fifteenmile Creek 4th order (Fivemile Creek to mouth*)	Sediment, *E. coli*	
Nampa	Fifteenmile Creek	ID17050114SW007_04- *Fifteenmile Creek 4th order (Fivemile Creek to mouth*)	Sediment, *E. coli*	
Nampa	Tenmile Creek	ID17050114SW008_03- *Tenmile Creek - 3rd order below Blacks Creek Reservoir*	Sediment, *E. coli*	
Nampa	Fivemile Creek	ID17050114SW010_02- *Fivemile Creek, Eightmile and Ninemile Creeks - 1st & 2nd order*	*E.coli*	
		ID17050114SW010_03- *Fivemile Creek - 3rd order tributaries*	Sediment, *E. coli*	
Nampa	Willow Creek	ID17050114SW015_03 *Willow Creek - 3rd order*	Sediment	

Discussion: IDEQ established bacteria and sediment targets for the impaired segments of Indian, Mason, Fifteenmile, Tenmile, Fivemile, and Willow Creeks in the *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum (LBR 2015 TMDL Addendum).*

Regulated small MS4s that discharge directly or indirectly to these waters from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties include ACHD, , Middleton;

[86] See: *Illicit Discharge Detection and Elimination: A Guidance Manual*, October 2004; Chapters 7, 11, and 12.

Caldwell; Nampa; Idaho Transportation District #3; Ada County; Canyon Highway District #4; and Nampa Highway District #1.

The LBR 2015 TMDL Addendum establishes applicable storm water targets, of 20 mg/L, less 2.5 mg/L for natural background for sediment, and 126 cfu/100 mL for *E. coli*. These targets are not end-of pipe limits, but instead are averages (4-month average for sediment and 30 days average for *E. coli*) that only apply to MS4 outfalls discharging over the entire averaging period. Where such long-duration discharges from MS4 outfalls occur, the same target concentrations apply to every storm water outfall. However, because wet weather MS4 discharges typically last only a few hours or days, the TMDL considers such wet weather discharges to be short duration pollutant sources; DEQ provides the following narrative interpretation of the TMDL WLAs for short-term discharges of bacteria and sediment:

> "*1. Storm water entities must continue management practices that reduce sediment and E. coli; [and]*
> *2. Storm water entities must continue to identify and characterize inputs to their systems pollutant*."[87]

Conclusion: The requirements for the comprehensive SWMP as directed in MS4GP Part 3, and the additional illicit discharge management activities required above for compliance with the 1999 LBR TMDL and the LBR Phosphorus TMDL, are appropriate and necessary to ensure progress towards complying with the LBR 2015 TMDL Addendum. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.

F. Paradise Creek in Idaho

Summary: There are no WLAs established by the EPA-approved TMDL for the Idaho portion of Paradise Creek. Implementation of the comprehensive SWMP pursuant to MS4GP Part 3, by the regulated small MS4s designated by EPA (i.e., City of Moscow and University of Idaho), is consistent with the EPA-approved TMDL.

[87] See: *Lower Boise River TMDL: 2015 Sediment and Bacteria Addendum*, pages 51-55.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	Paradise Creek	ID17060108CL005_02 *Paradise Creek - Urban boundary to Idaho/Washington border*	Ammonia (Un-ionized) *E.* coli Fecal Coliform Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation Temperature	*Paradise Creek TMDL Water Body Assessment and Total Maximum Daily Load, December 1997.* Approved February 1998. *Paradise Creek Total Maximum Daily Load Implementation Plan* December 1999. *Paradise Creek TMDL 2015 Bacteria Addendum,* October 2015. Submitted to EPA.

Discussion: EPA approved IDEQ's *Paradise Creek Water Body Assessment and TMDL* (Paradise Creek TMDL) in 1998; the TMDL addresses ammonia, nutrients, sediment, bacteria, and temperature. . The Paradise Creek TMDL identifies urban runoff, discharged from within the City of Moscow boundaries, as a contributing source of pollutants to Paradise Creek. Urban runoff is included as part of the non-point source load allocation for each parameter.

As previously discussed in Section XX of this document, EPA proposes to designate MS4 discharges to Paradise Creek within the boundaries of the City of Moscow as requiring NPDES permit coverage under the MS4GP. At a minimum, EPA proposes to consider the MS4s operated by City of Moscow and University of Idaho to be "regulated small MS4s" upon the MS4GP effective date.

The Paradise Creek TMDL establishes load allocations in the form of in-stream targets for fecal coliform, TSS, and total phosphorus. IDEQ subsequently developed the *Paradise Creek TMDL 2015 Bacteria Addendum (Paradise Creek 2015 Addendum*), to update the bacteria indicator from fecal coliform to *E. coli* based on the current Idaho WQS criterion for secondary contact recreation. The combined instream targets are established for *E. coli* at 126 cfu/100 mL (collected as a 5-sample geometric mean over 30 days); total phosphorus, at 0.136 mg/l during the summer months; and TSS, at 50 mg/l over background for 10 consecutive days. The TMDL(s) identify land development, urban storm water systems, resident and business activities, roadways, and parking lots as among the primary nonpoint sources of bacteria, TSS, and total phosphorus in the Paradise Creek watershed.[88]

The TMDL states that regulated small MS4 operators must "obtain an NPDES permit from EPA, implement a comprehensive municipal storm water management program, and use BMPs to control pollutants in storm water discharges to the maximum extent practicable."[89]

Conclusion: EPA determines that implementation of the comprehensive SWMP, pursuant to MS4GP Part 3, by the regulated small MS4s designated by EPA (including, but not limited to, City of Moscow and

[88] See *Paradise Creek TMDL*, pages 24 and 45; and *Paradise Creek 2015 Addendum,* page 13.
[89] See *Paradise Creek 2015 Addendum,* page 29.

University of Idaho) is consistent with the EPA approved TMDL for Paradise Creek. No additional requirements are necessary to ensure compliance with the Paradise Creek TMDL's bacteria, TSS, and total phosphorus targets.

G. Paradise Creek, downstream of Idaho/Washington border

Summary: EPA requires additional SWMP requirements in MS4GP Appendix F.5 for affected MS4 permittees discharging to Paradise Creek in order to comply with the WLA established in the EPA-approved TMDL established by the Washington Department of Ecology (Ecology).

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	Paradise Creek (WA portion)	Paradise Creek 10443 (WA-34-1025) Paradise Creek 10439 (WA-34-1025) Paradise Creek 10444 (WA-34-1025)	Fecal Coliform Bacteria	*South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060 October 2009. Approved 2009.

Discussion: The South Fork of the Palouse River, downstream of the Idaho/Washington border is impaired for fecal coliform. EPA approved Ecology's *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report (SF Palouse River FC Bacteria TMDL),* in 2009. Ecology conducted wet and dry season sampling in Paradise Creek at the Washington-Idaho state line as part of the assessment study, and found a large average pollutant load at the state line-monitoring site during the dry season. Ecology requires that discharge meet the Washington fecal coliform standards in Paradise Creek at the state border so that sufficient capacity remains in the river for other Washington sources in the South Fork Palouse River.

Conclusion: EPA determines that additional controls are necessary to reduce bacteria loading to meet the load reduction targets for fecal coliform established by Ecology's *SF Palouse River FC Bacteria TMDL*. In addition to implementation of a comprehensive SWMP pursuant to MS4GP Part 3 by regulated small MS4s designated by EPA (including but not limited to, City of Moscow and University of Idaho), the illicit discharge management control measures implemented by the affected permittees should be targeted to investigate and remove sources of bacteria entering the storm drain system.

EPA is proposing the following three additional, or enhanced, SWMP control measures to meet Ecology's load reduction targets for fecal coliform. These actions require the permittees to focus assessment, education, and enforcement efforts on facilities that are most likely to discharge pollutants of concern. Permittees may model or replicate the similar programs currently conducted within the Boise/Garden City Phase I MS4 Permit Area by the Ada County Highway District, City of Boise, City of Garden City, and other Phase I MS4 permittees.

- Affected MS4 permittees must maintain an inventory and map of certain industrial and commercial activities, including all animal related facilities, within the Permit Area to

target and reduce the discharge of sediment and bacteria from industrial and commercial operations to the MS4. The purpose of the inventory is to assist permittees in identifying problem areas, with particular emphasis on sources likely contribute sediment or bacteria to receiving waters. To ensure the inventory and map are current and accurate, MS4 permittees should update both at least semi-annually using information obtained from field activities and intra-agency sources (such as business licenses, pretreatment permits, sanitary sewer hookups, etc.) For any facilities identified as needing separate NPDES permit under the federal storm water requirements, MS4 permittees may inform sources of their obligation directly, and/or may notify EPA by providing basic facility information for further Agency action.

- Affected MS4 permittees must collectively identify two specific industrial/commercial activities not adequately addressed through existing programs within the watershed, develop best management practices for each activity, and educate selected industrial/commercial audiences regarding performance expectations.
- Affected MS4 permittees must cooperatively prioritize and inspect such inventoried industrial and commercial facilities/activities that discharge to receiving waters and/or to the MS4s.

H. South Fork Palouse River in Idaho

Summary: There are no WLAs established by the EPA-approved TMDL for the portion of the South Fork Palouse River within Idaho. For regulated small MS4s discharging to the South Fork Palouse River in Idaho (i.e., City of Moscow, as EPA has proposed to designate City of Moscow as a regulated small MS4), implementation of the comprehensive SWMP (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	South Fork Palouse River	ID17060108CL002_03 *South Fork Palouse River-Gnat Cr. to Idaho/Washington border*	*E. coli* Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation Temperature, water	*South Fork Palouse River Watershed Assessment and TMDLs*, February 2007. Approved October 2007.

Discussion: In 2007, IDEQ established instream targets for *E. coli*, nutrients, temperature, and sediment for the impaired segment of the South Fork Palouse River within Idaho as part of its *South Fork Palouse River Watershed Assessment and TMDLs* (SF Palouse TMDL).

EPA is using its authority to designate the City of Moscow as a regulated small MS4; a portion of the Moscow MS4 discharges to the South Fork Palouse River.

The SF Palouse TMDL does not establish WLAs for urban storm water sources; IDEQ established a year round percent reduction target for *E.coli* of 41%.

Conclusion: Implementation of the comprehensive SWMP pursuant to MS4GP Part 3, by City of Moscow is consistent with the EPA approved SF Palouse TMDL; no additional requirements are needed to ensure compliance with the Idaho TMDL's targets for *E. coli*, nutrient, temperature and sediment.

I. South Fork of the Palouse River, downstream of ID/WA border

Summary: EPA requires additional SWMP requirements in MS4GP Appendix F.5 for affected MS4 permittees discharging to the South Fork Palouse River, to comply with the WLAs established in the EPA-approved TMDLs established by Washington Department of Ecology.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Moscow	South Fork Palouse River (WA portion)	South Fork (SF) Palouse River 6712 (WA-34-1020) SF Palouse River 6711 (WA-34-1020) SF Palouse River 6710 (WA-34-1020) SF Palouse River 6707 (WA-34-1020)	Fecal coliform bacteria Chlorinated Pesticides Polychlorinated Biphenyls (PCBs)	*South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060 October 2009. Approved *Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan;* Publication No. 07-03-018 *July 2007.* Approved November 2007.

Discussion regarding Bacteria: The South Fork of the Palouse River, downstream of the Idaho/Washington border, is impaired for fecal coliform. EPA approved Ecology's *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report (SF Palouse River FC Bacteria TMDL),* in 2009. Sampling conducted by Ecology in the Washington portion of the upper SF Palouse River (between the Idaho-Washington state line to the boundary limits of the City of Pullman, above Paradise Creek) demonstrates that the majority of bacteria loading to the upper SF Palouse River during both the wet season (56%) and dry season (67%) was from upstream sources in Idaho. Ecology states there is a "*linear relationship between TSS concentrations and FC bacteria concentrations in the upper SF Palouse River, indicating that the control of runoff processes (soil-erosion control) could result in lower FC concentrations.*" Ecology then concludes that, "*While the bacteria counts at the Idaho border were within standards, the average wet-season FC bacteria load appears to use up most of the downstream load capacity in the upper SF Palouse.*" [90] Because EPA intends to designate Moscow and other MS4s upstream of the state line as needing coverage under a MS4 permit, Ecology recommends the permit include specific actions to reduce wet and dry season bacteria loads.[91]

Conclusion: EPA determines that regulated small MS4s must implement additional to sufficiently reduce bacteria loading and meet the load reduction targets for fecal coliform established by Ecology's *SF*

[90] SF Palouse River FC Bacteria TMDL, page 36-39, and page 83
[91] SF Palouse River FC Bacteria TMDL, page 100

Palouse River FC Bacteria TMDL. In addition to implementation of the SWMP pursuant to MS4GP Part 3, affected regulated small MS4s designated by EPA (including City of Moscow and University of Idaho), the additional control measures identified for compliance with *SF Palouse River FC Bacteria TMDL* in Paradise Creek, will be sufficient to investigate and remove sources of bacteria entering the storm drain system.

Discussion regarding PCBs: The South Fork of the Palouse River, downstream of the Idaho/Washington border, does not meet the Washington WQS for polychlorinated biphenyls (PCBs). Ecology's current water quality criterion for total PCBs is 170 picograms per liter (pg/L).

The *Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan* (Palouse River PCB TMDL), completed in 2007 and subsequently approved by EPA later that year, establishes the instream target and describes how controls will be implemented within the Palouse River will achieve WQS for PCBs and dieldrin. The TMDL identifies municipal SWMPSWMP activities in the urban boundary of the City of Pullman (conducted by the City and by Washington State University) as necessary to reduce PCB loading to the Palouse River.

Conclusion: For reasons outlined in Appendix 4.B of this document, (pertaining to PCB pollutant load reductions necessary within the Idaho portion of the Spokane River), additional SWMP activities and monitoring for PCBs must be conducted by regulated small MS4s discharging to the South Fork Palouse River. EPA proposes to designate City of Moscow and University of Idaho as needing MS4 permit coverage.

The additional SWMP activities and monitoring reflect EPA's recommended NPDES permit conditions related to PCB impairments for regulated small MS4 discharges. As noted in Appendix 4.B, EPA expects such actions to contribute the necessary upstream reductions in PCB loading affecting impaired segments of the South Fork Palouse River downstream within Washington State.[92]

J. Tammany Creek

Summary: EPA requires additional SWMP requirements and monitoring in MS4GP Appendix F.6 for Affected MS4 Permittees discharging to Tammany Creek in order to comply with the WLAs established in the EPA-approved TMDLs.
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[92] See *EPA's Plan for Addressing PCBs in the Spokane River, Appendix B, pages. 5-8, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015).*

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Lewiston	Tammany Creek	ID17060103SL014_02 *Tammany Creek - WBID 015 to unnamed tributary* ID17060103SL014_03 *Tammany Creek - Unnamed Tributary to mouth* ID17060103SL016_02 *Tammany Creek-source to Unnamed Tributary(T34N, R04W, Sec19)*	*E. coli* Nitrogen, Nitrate Total Phosphorus Sedimentation Siltation	*Tammany Creek Sediment TMDL*, September 2001.Approved February 2002. *Tammany Creek Watershed (HUC 17060103) TMDL Addendum*, September 2010. Approved December 2010.

Discussion: In 2010, IDEQ updated established waste load allocations for storm water point sources discharging nutrients (total phosphorus and nitrite plus nitrate as nitrogen), bacteria, and sediment to the impaired segments of Tammany Creek in its *Tammany Creek Watershed TMDL Addendum* (Tammany Creek TMDL).

Regulated small MS4s discharging to Tammany Creek includes, but is not limited to, the City of Lewiston. EPA has not issued a NPDES permit to the City of Lewiston, thus, the City of Lewiston, and potentially other regulated small MS4s discharging to Tammany Creek, has not yet fully implemented a comprehensive Storm water Management Program in compliance with an applicable NPDES permit for MS4 discharges.

The Tammany Creek TMDL allocates 6% of the total load allocations for each pollutant to the City of Lewiston and other regulated small MS4s within the watershed. Another 1.5 % of the available loading allows for future development growth in the watershed. The TMDL sets monthly sediment targets, and IDEQ estimates that sediment reductions of up to 83% are necessary to attain the sediment target(s). IDEQ also sets an instream target for *E. coli* equal to the Idaho WQS for secondary contact recreation (i.e., 30-day geometric mean concentration of 126 cfu/100ml), estimating that a 72% reduction is need from all contributing bacteria sources in order to meet the instream target. IDEQ provides a numeric interpretation of the Idaho WQS to represent nutrients, (i.e., 0.072 mg/l and 0.03 mg/L for nitrite plus nitrate as nitrogen and total phosphorus, respectively) representing a needed reduction in nitrates of approximately 98%, and reduction in total phosphorus loads up to 89%.

Conclusion: Tailored SWMP requirements and monitoring, in addition to implementation of the comprehensive SWMP pursuant to MS4GP Part 3, are necessary to ensure pollutant reductions identified as necessary in the Tammany Creek TMDL. The SWMP control measures include enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures. Additional provisions to address animal facilities will ensure that the regulated small MS4(s) target sources of bacteria. .

EPA is proposing the following three additional, or enhanced, SWMP control measures to meet IDEQ's load reduction targets for *E. Coli*. These actions require the MS4 permittee(s) to focus assessment, education, and enforcement efforts on facilities that are most likely to discharge pollutants of concern.

Permittees may model or replicate the similar programs currently conducted within the Boise/Garden City Phase I MS4 Permit Area by the Ada County Highway District, City of Boise, City of Garden City, and other Phase I MS4 permittees.

- Affected MS4 permittees must maintain an inventory and map of certain industrial and commercial activities, including all animal related facilities, within the Permit Area to target and reduce the discharge of sediment and bacteria from industrial and commercial operations to the MS4. The purpose of the inventory is to assist permittees in identifying problem areas, with particular emphasis on sources likely contribute sediment or bacteria to receiving waters. To ensure the inventory and map are current and accurate, MS4 permittees should update both at least semi-annually using information obtained from field activities and intra-agency sources (such as business licenses, pretreatment permits, sanitary sewer hookups, etc.) For any facilities identified as needing separate NPDES permit under the federal storm water requirements, MS4 permittees may inform sources of their obligation directly, and/or may notify EPA by providing basic facility information for further Agency action.
- Affected MS4 permittees must collectively identify two specific industrial/commercial activities not adequately addressed through existing programs within the watershed, develop best management practices for each activity, and educate selected industrial/commercial audiences regarding performance expectations.
- Affected MS4 permittees must cooperatively prioritize and inspect such inventoried industrial and commercial facilities/activities that discharge to receiving waters and/or to the MS4s.

K. Lindsay Creek

Summary: EPA requires additional SWMP requirements and monitoring in MS4GP Appendix F.6 for affected MS4 permittees discharging to Lindsay Creek in order to comply with the WLAs established in the EPA-approved TMDLs.

Urbanized Area/City	Receiving Water	Waterbody Assessment Unit	Impairment Pollutants	TMDL Status
Lewiston	Lindsay Creek	ID17060306CL003_02 *Source to mouth* ID17060306CL003_03 *Source to mouth*	*E.* coli Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation	*Lindsay Creek Watershed Assessment and Total Maximum Daily Loads*, December 2006, Amended March 2007. Approved, June 2007.

Discussion: EPA approved the *Lindsay Creek Watershed Assessment and Total Maximum Daily Loads (*Lindsay Creek TMDL) in 2007, wherein IDEQ allocated a portion of the pollutant loads as a waste load allocation for urban storm water in order to control bacteria and sediment in Lindsay Creek. The TMDL assigns no WLA to urban runoff for nutrients.

Regulated small MS4s that discharge to Lindsay Creek include, but may not be limited to, the City of Lewiston. City of Lewiston, and other potential regulated small MS4s discharging to Lindsay Creek, has not yet fully implemented a comprehensive Storm Water Management Program in compliance with an applicable NPDES permit.

The TMDL sets the instream target for *E. coli* equal to the Idaho WQS (30-day geometric mean concentration of 126 cfu/100ml), and estimates that a 66% reduction is needed from all contributing bacteria sources in order to meet the instream target. The TMDL sets an average monthly target of 50 mg/L TSS, not to exceed a maximum daily average of 80 mg/L. Sediment reductions of up to 81% necessary are likely necessary during certain months in order to attain the sediment target.

The TMDL allocates 3% of the total load allocations for bacteria and sediment to the City of Lewiston and other regulated small MS4s within the watershed, and allows another 8% of the available loading, per pollutant, to allow for future development growth within the Lewiston Orchards area of the watershed. IDEQ states that thee WLA and reserve allocation for growth are temporary, and subject to future revision, until more current and applicable data becomes available.[93]

Conclusion: Tailored SWMP requirements and monitoring, in addition to implementation of the comprehensive SWMP pursuant to MS4GP Part 3, are required to ensure pollutant reductions identified as necessary in the Lindsay Creek TMDL. The SWMP control measures include enforceable requirements for erosion and sediment control; permanent storm water management controls for development occurring at sites disturbing 5,000 square feet or more; and proper operation and maintenance of roadway surfaces (including regular street sweeping). EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures. Additional targeted provisions to address animal facilities, as previously described for MS4 discharges into Tammany Creek, will ensure that the affected Permittees address sources of bacteria.

[93] See" Lindsay Creek Watershed Assessment and TMDLs, page 56.

Appendix 8: Anti-backsliding

The MS4GP requires Permittees to control pollutants discharged through their MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The MS4GP requires permittees to implement a comprehensive SWMP as the primary mechanism to achieve the necessary pollutant reductions in their MS4 discharges.[94]

As previously described in Part III.C of this document, the SWMP requirements in the MS4GP (when compared to EPA's previously issued Phase II MS4 permits in Idaho) reflects EPA's iterative decision-making process to identify the "*controls necessary to reduce the discharge of pollutants from the MS4 to the MEP*" between NPDES permit terms. Accordingly, the MS4GP contains clear, specific, and measureable provisions to prescribe the continued implementation of specific tasks, BMPs, BMP design requirements, performance requirements, adaptive management requirements, schedules for implementation, and maintenance, and frequency of actions as minimum control measures. Although such provisions are expressed differently than the comparable provisions in EPA's previously issued Phase II small MS4 permits in Idaho, EPA has determined that the provisions in the MS4GP are, in all cases, at least as stringent as those established in the previous permits.

[94] See 40 CFR § 122.44(k).